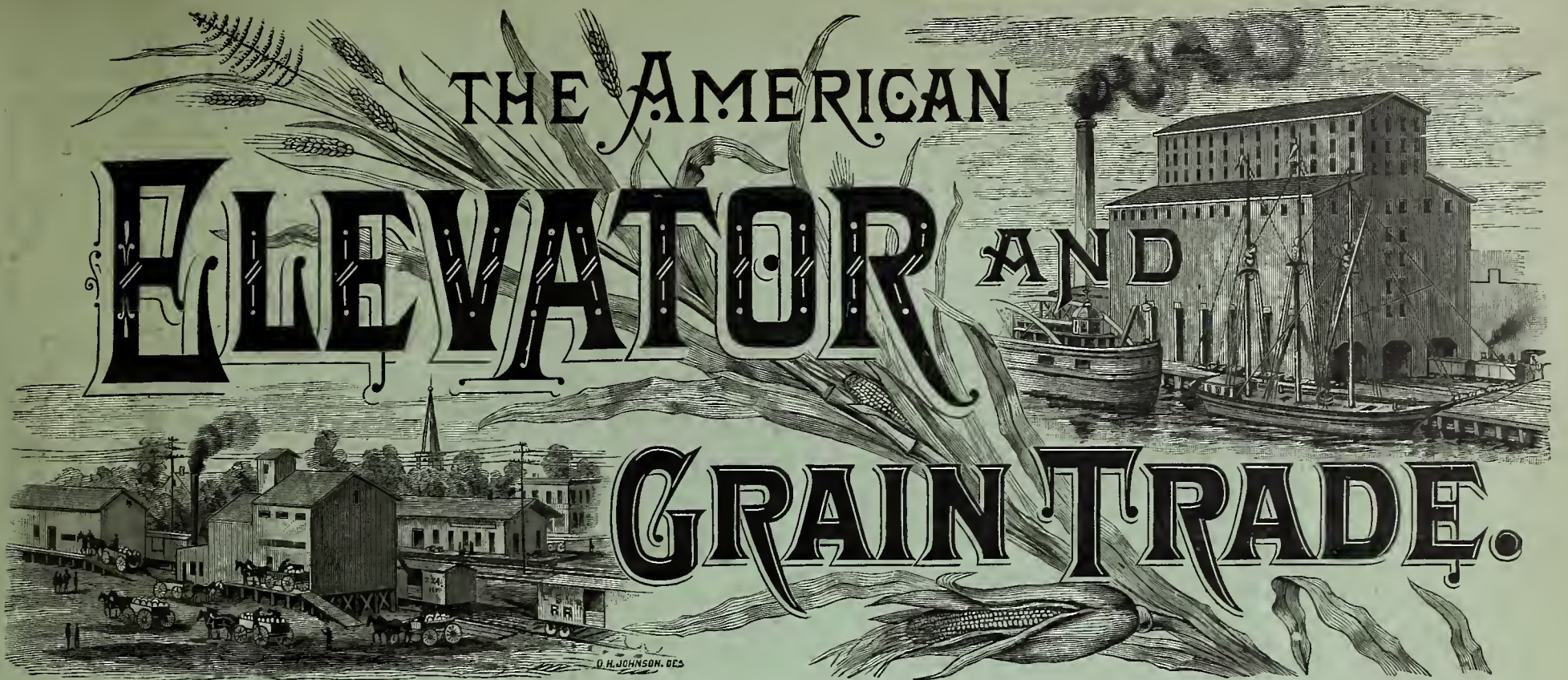


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



Entered at the Post Office at Chicago, Ill., for transmission through the mails at second-class rates.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XXIV.

CHICAGO, ILLINOIS, AUGUST 15, 1905.

No. 2. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

Stephens-Adamson Mfg. Co.

AURORA ILLINOIS

Manufacturers of the
**Highest Grade Grain
Handling Machinery**

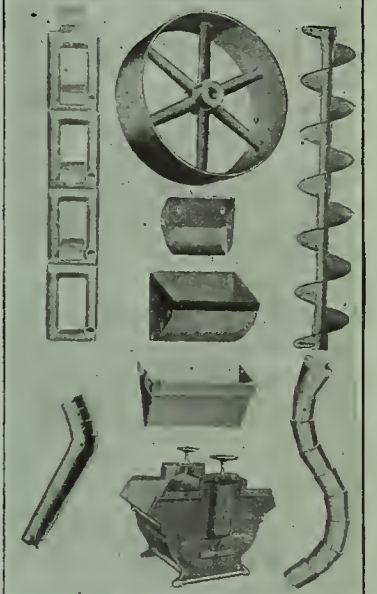
CHICAGO OFFICE: FIRST NATIONAL BANK BLDG.

We Are Manufacturers
of

Elevating and Conveying Machinery

For repairs or complete equipments, get
our prices—they will interest you.

BURRELL MFG. CO.
BRADLEY, ILL.



THIS IS THE Muir Improved Friction Clutch Pulley

There is no other "just as good." We have them in stock and guarantee every one. They can be adjusted while the shaft is running. This Clutch Pulley is especially adapted for Clipper and Cleaner Drives.

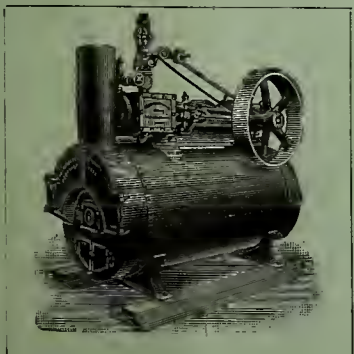
SKILLIN & RICHARDS MFG. CO., CHICAGO

—Originators and Manufacturers of—

Cold Rolled Spiral Steel Conveyor

INTERCHANGEABLE WITH OTHER KINDS

But very much **BETTER** in wearing qualities, as cold rolled steel is harder and **TOUGHER** than when softened in the furnace and dropped into shape. **COSTS NO MORE.** We make all kinds of **MACHINERY FOR GRAIN ELEVATORS.** We send Pinch Bars on trial. Our Sprocket Wheels and Chain are the best. We also make Pulleys, Shafting, Hangers, Car-loading Spouts, Elevator Buckets, etc. *Write for Catalogue.*



HERE'S THE POWER

that's simple and efficient and reliable. Not the whimsical and unreliable gas engine. It's steam and it's

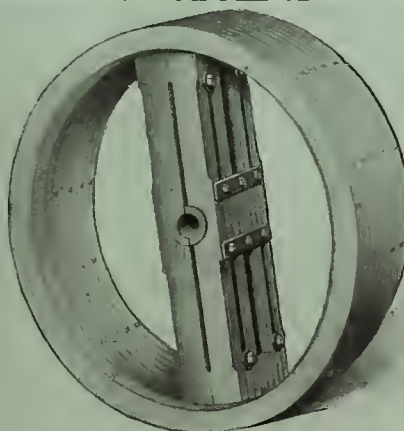
A LEFFEL ENGINE

After all others are tried out you come back to steam for durability and greatest economy. Leffel is the line adapted to grinding, shelling and elevator service. Many styles, horizontal and upright. Quick steaming power that's sure and equal to every duty. Waste cobs furnish more than enough fuel. "Leffel quality." Write for large free catalogue and state your wants for estimate.

JAMES LEFFEL & CO.

Box 158

SPRINGFIELD, OHIO



Buy your

Grain Elevator Machinery and Supplies

from the southwestern house that
carries complete stocks for prompt
shipment.

No better goods offered. Prices will suit
you. Send for catalogue No. 2

K. C. Manufacturing & Supply Co.

427-431 West Fifth Street, KANSAS CITY, MO.

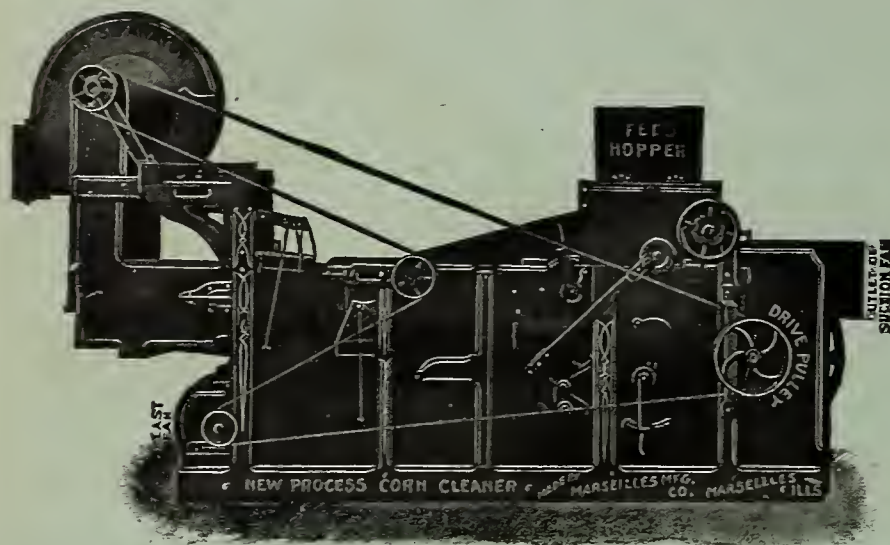
Corn Shellers? Do We Make 'Em?

*Well, just ask us for a copy
of our Catalogue No. 35*

IT tells all about the best and most complete line of Corn Shelling Machinery manufactured. We make Shellers and Cleaners as separate machines. Also a complete line of

Combined Shellers and Cleaners

for shelling both husked and unhusked corn.



NEW PROCESS CORN CLEANER, WITH SHUCK SEPARATING FAN.



NEW PROCESS CORN SHELLER ONLY.

The New Process Combined Shuck Sheller and Cleaner is the only machine that can be fitted for either husked corn of Northern States or the unhusked corn of Southern States.

*If you're going to buy a Corn Sheller
or Corn Cleaner, get a New Process.*

We are also manufacturers of Power Transmission Appliances and Grain Elevating and Conveying Machinery. We solicit specifications and the privilege of quoting on any requirements in this line.

Marseilles Mfg. Co. MARSEILLES, ILLINOIS.
BRANCHES

Peoria, Ill.

Council Bluffs and Cedar Rapids, Ia.

Kansas City, Mo.

When in the Market

FOR

Link Belting	Rubber Belting
Sprocket Wheels	Elevator Buckets
Spiral Conveyor	Loading Spouts
Rope Sheaves	Manila Rope
Shafting	Boxes
	Hangers
Friction Clutch Pulleys	
Boot Tanks	Boilers

Write us

**LINK-BELT SUPPLY
COMPANY**

MINNEAPOLIS, MINN.

The MIDLAND Machinery Company



We can make prompt shipments on complete grain elevator equipments and fill small orders with equal care as large. You ORDER—we do the REST.

MINNEAPOLIS, MINN.

MODERN ELEVATING, CONVEYING AND POWER TRANSMISSION MACHINERY

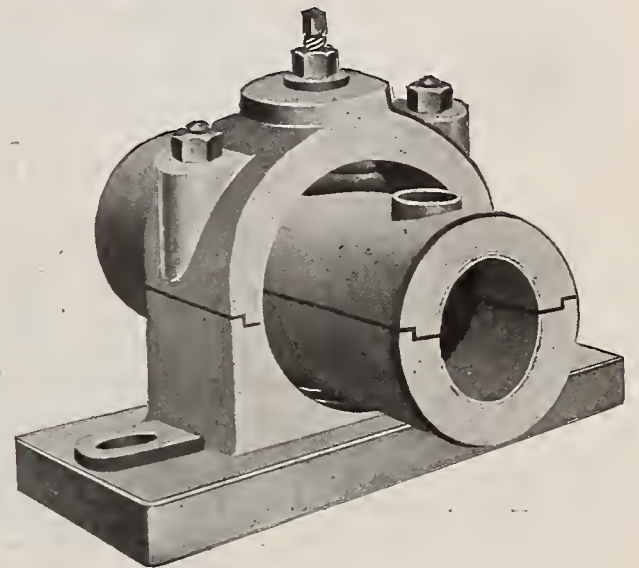
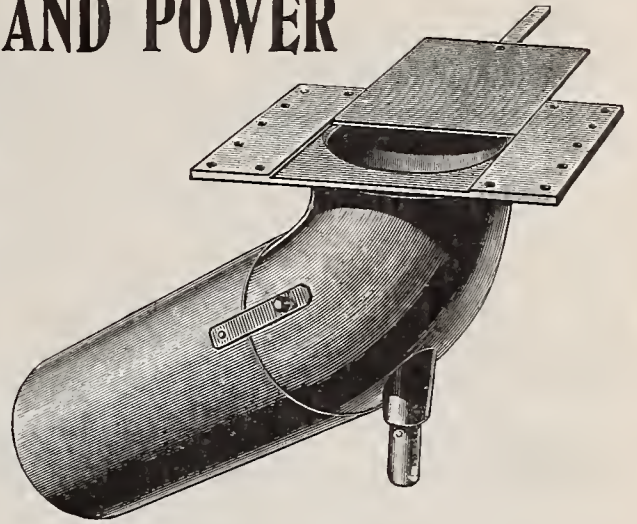
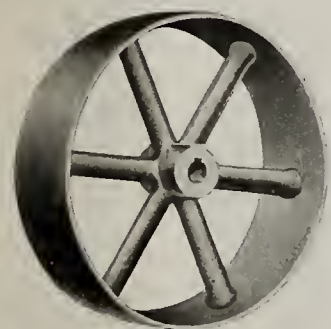
We manufacture one of the most complete lines in the country.

We make prompt shipments and quote low prices.

When in the market for Shafting, Pulleys, Bearings, Rope Sheaves, Boots, Buckets, Belting, Spouting, Etc., write us. You will find us in line.

Our machinery is growing rapidly in popularity among the grain trade throughout the country.

Catalogues upon request.



Kingsland-Kay-Cook Mfg. Co. - St. Louis

THE HESS GRAIN DRIER

*Makes Money
Saves Money*

*Necessary to all up-to-date
grain elevators*

USED EVERYWHERE

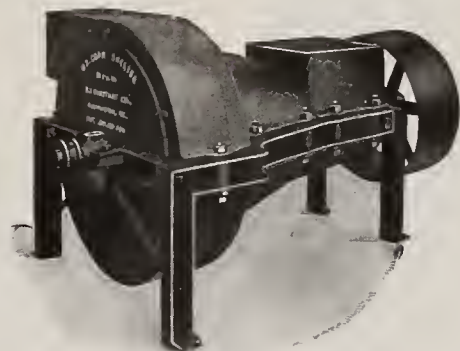
Free Booklet

Send for one

Hess Warming & Ventilating Co.

710 Tacoma Bldg., CHICAGO

Will ship you one on 30 days' trial



PATENT PENDING

NEEDHAM, IND., April 17th, '05.

B. S. CONSTANT CO., Bloomington, Ill.

GENTLEMEN:—Having tried your No. 4 U. S. Corn Sheller and tested it thoroughly, must say it will surprise any grain man as to its make-up and what it will do.

It does not crack the grain any more than the other makes so universally used; I hardly think as much.

It runs easily and will shell more according to its size. All iron; no hopping; small space it occupies, interchangeable concaves, and the fact that every piece is bolted from the outside, makes it a very desirable machine.

It has the best principles and it has eliminated the objectional features common to most all other shellers.

I certainly recommend this sheller to anyone who wants a good machine; one that will free your mind from the worry common to the older ones. Yours with best wishes for the U. S.,

E. M. FISHER.

*If interested, send for catalogue
and prices.*

B. S. CONSTANT CO.

BLOOMINGTON—ILLINOIS

Correct Weights

The Bowlus Automatic Weighing Machine will weigh out your grain accurately to the pound, and will dump and register the weight without the services of a weighman. It works automatically and can be adjusted to dump at any weight. Its salient features are

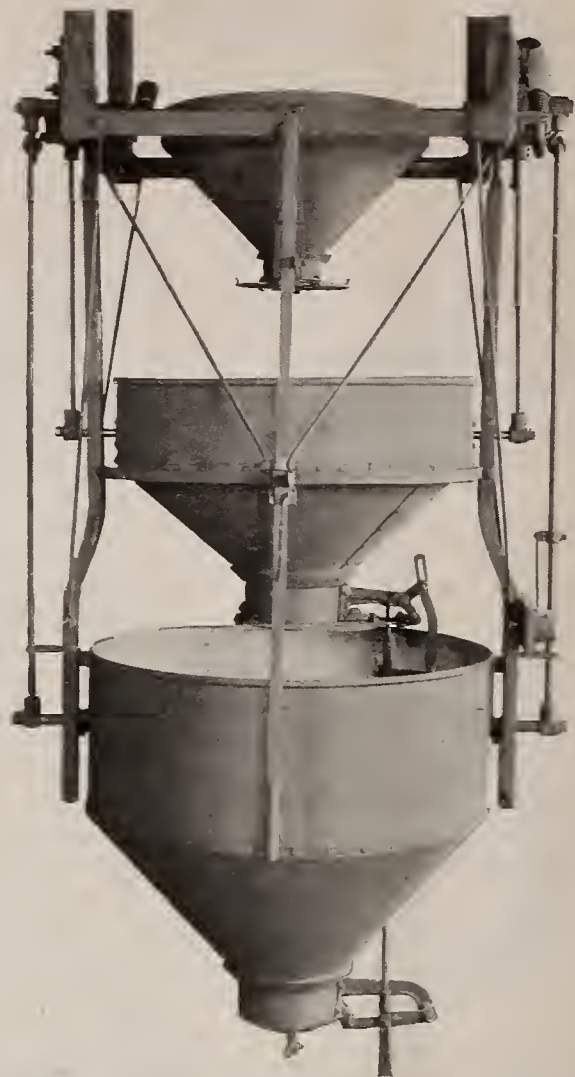
Accuracy
Simplicity
Durability

Machine to weigh out 60,000 pounds of any grain per hour goes in space 7 feet high by 4 feet square.

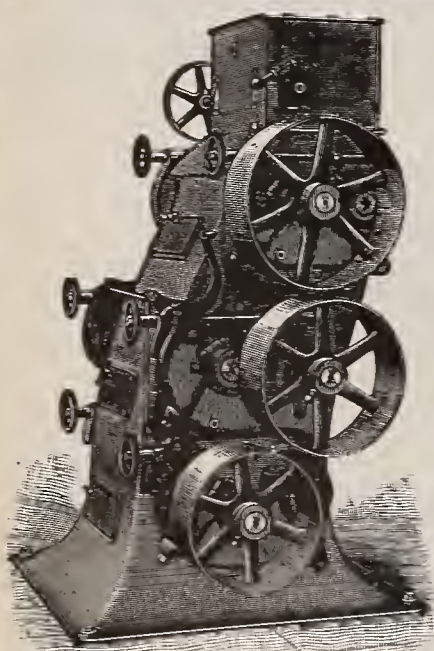
Write for catalog and detailed description

The Bowlus Automatic Scale Co.

Springfield, Ohio, U. S. A.



SIDE VIEW



3-PAIR-HIGH, SIX-ROLLER MILL.

CUSTOM WORK!

UTILIZE YOUR POWER
BY OPERATING A GOOD MILL FOR GRINDING

...FEED AND MEAL...
IT PAYS

WE MANUFACTURE
THREE-ROLL, TWO-BREAK MILLS, 2 Sizes.
THREE-PAIR HIGH, SIX-ROLLER MILLS, 4 Sizes.
TWO-PAIR HIGH, FOUR-ROLLER MILLS, 5 Sizes,

...And...

PORTABLE FRENCH BUHR MILLS,
85 Sizes and Styles.

SEND FOR BOOK ON MILLS.



VERTICAL
UNDER RUNNERS,
UPPER RUNNERS,
PULLEY AND GEAR DRIVES.

ELEVATOR SUPPLIES AND POWER CONNECTIONS.

ROPE DRIVES, GEARING, CORN SHELLERS and CLEANERS, GRAIN CLEANERS.

DUST COLLECTORS (Tubular, Automatic).

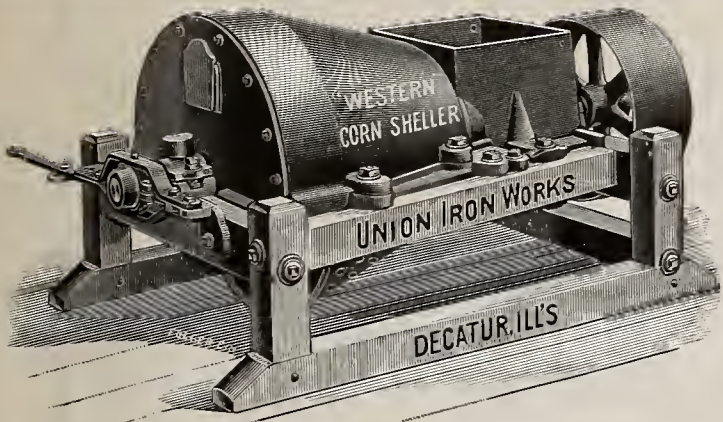
CUPS.

We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our 3½x3 inch, list price 9c., has as much capacity as others 3½x3½ inch, list price 10c. Our prices are right.

CORRESPONDENCE SOLICITED.

NORDYKE & MARMON CO., INDIANAPOLIS, INDIANA, U. S. A.

FLOURING MILL ENGINEERS, IRON FOUNDERS AND MACHINISTS. ESTABLISHED 1851.



Western Warehouse Sheller

WRITE FOR CATALOG WITH CUTS AND FULL
DESCRIPTIONS TO

UNION IRON WORKS

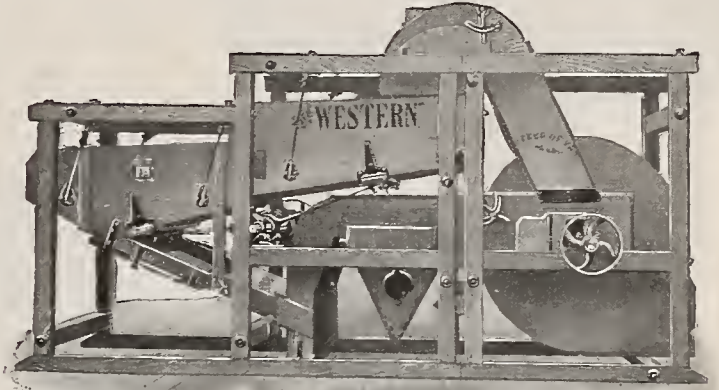
DECATUR, ILL.

Are You Building a New Elevator?
Are You Remodeling Your Old One?

IF SO, EQUIP IT WITH

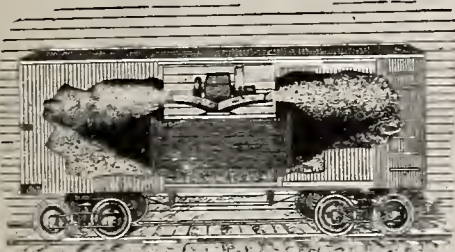
"Western" Machinery

Plans furnished
upon application



"Western" Shaker Cleaner

The Boss Car Loader

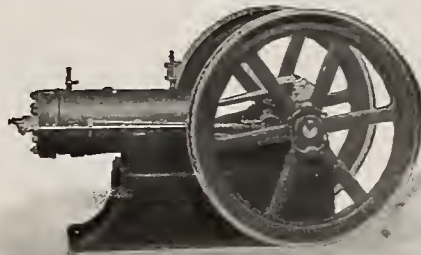


which is shown in the accompanying cut, is without doubt the best car loader on the market.

For particulars, write to

Maroa Mfg. Co.

Maroa, Ill.



The Easy Starting Lauson

A simple and reliable Gasoline Engine that is perfect in every detail. It is free from trappy and delicate parts that are liable to cause trouble. It will start as easy and work as well at 20 below zero as in warm weather. Write for our 1905 catalog describing our line of stationary and portable Engines from 2 to 20 H. P.

The John Lauson Manufacturing Co.
New Holstein, Wis.

SCIENTIFIC IN SIMPLICITY EFFICIENCY
UNRIVALED IN

The Standard of the Trade

Modern in design—perfect in detail—correct in construction

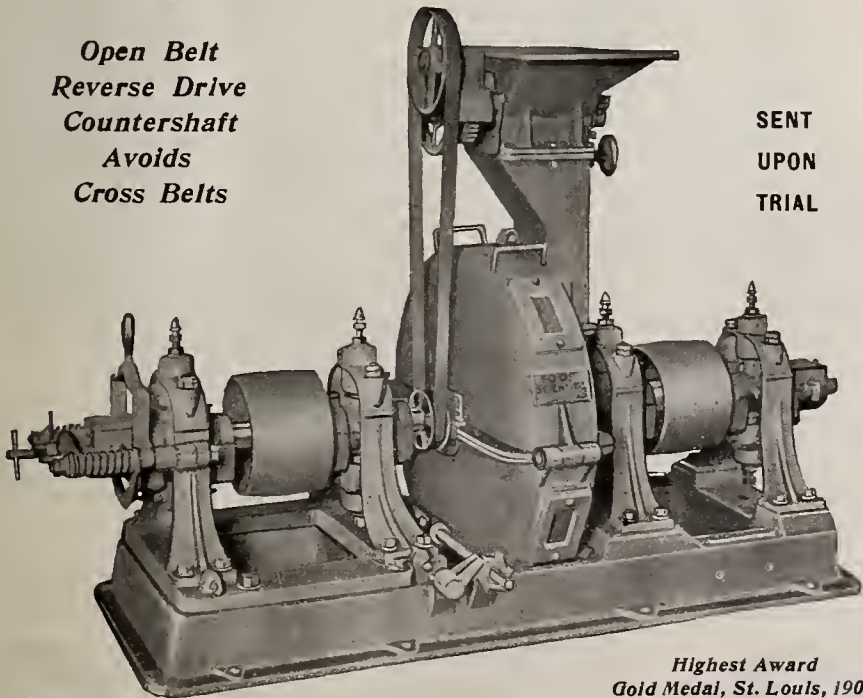
Less Power AND More Work

Interchangeable ring oiling bearings, quick release, automatic relief springs, duplex ball bearings, force feed, renewable eye to feeding head, quick plate changing device, **EASIEST TRAMMED MILL.**

Grinds ear corn, chop feed, bran, offal, cracks corn, etc., **FAST, FINE GRINDING.**

Open Belt
Reverse Drive
Countershaft
Avoids
Cross Belts

SENT
UPON
TRIAL



Highest Award
Gold Medal, St. Louis, 1904

THE FOOS MFG. CO. EST. 1878 **Springfield, Ohio**

THE AMERICAN MFG. CO.
MANILA - SISAL - JUTE CORDAGE
65 WALL ST., NEW YORK
CHICAGO BRANCH 85 KINZIE ST.



BEHIND "AMERICAN" CORDAGE

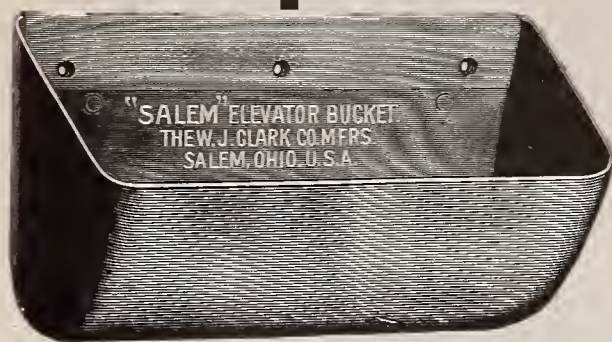
Stand the largest and best equipped Rope and Twine Mills in the U. S.
Uniformity in quality and workmanship assured.

"AMERICAN" TRANSMISSION
ROPE

"The Rope to Remember"

The Blue Book of Rope Transmission sent free upon request.

American Rope



Salem Elevator Buckets

Fill easily, carry the largest possible load, and empty clean. The reason for this will be seen in their rounded corners and advantageous shape.

They are well suited to handling ear corn, shelled corn, all the smaller grains, ground material, etc.

They can be obtained in a greater number of sizes and gauges than any other bucket on the market.

We are exclusive agents for the **Genuine Salem Buckets**, and fill orders promptly from stock. Made only by W. J. Clark Co., Salem, Ohio. Ask for Pamphlet.

H. W. Caldwell & Son Co., Chicago, New York
Woodward, Wight & Co., Ltd., New Orleans

What we hear from "LEVIATHAN" users

"Replying to your inquiry of recent date with reference to the lasting qualities of a Leviathan belt, bought from the Main Belting Co. in 1897, will say this belt gave us the best of satisfaction for four years, when it was taken out on account of a change in our power plant. The belt was cut and parts of it used on other work. We considered our original purchase a profitable investment. Signed: BLUE EARTH CITY MILL CO."

SEND FOR "FACTS."

MAIN BELTING COMPANY

Philadelphia, Boston
and Buffalo

55-57 Market St., Chicago, Ill.

ALFALFA

The Williams Pat. Alfalfa Hay

CUTTER and GRINDER

Write For Bulletin No. 6.

THE WILLIAMS PAT. CRUSHER & PULVERIZER CO.
2705 N. Broadway, St. Louis, Mo.

Cyclone Dust Collector



MANUFACTURED BY

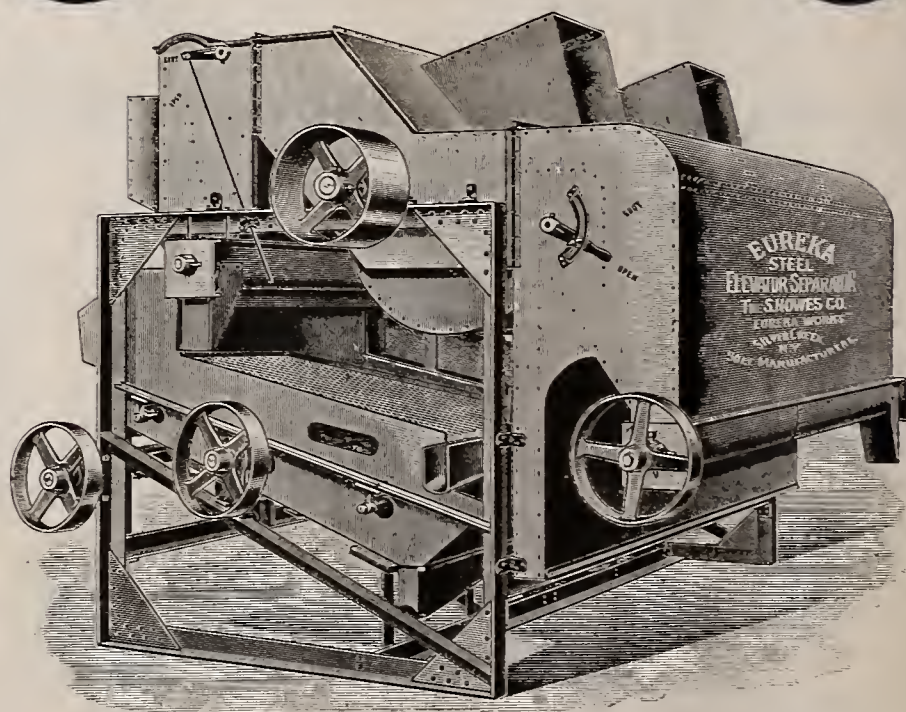
The Knickerbocker Co.

JACKSON, MICH.



The Largest Order

For Steel Cleaners that was ever placed was for fourteen largest size



"EUREKA" COUNTERBALANCED STEEL CONSTRUCTION SEPARATORS

Which are now used in the N. Y. C. R. R. Co.'s new elevator at Weehawken, N. J. Investigate them when in need of Steel Cleaners.

SOLE MANUFACTURERS

The S. HOWES CO., Eureka Works, Silver Creek, N. Y.

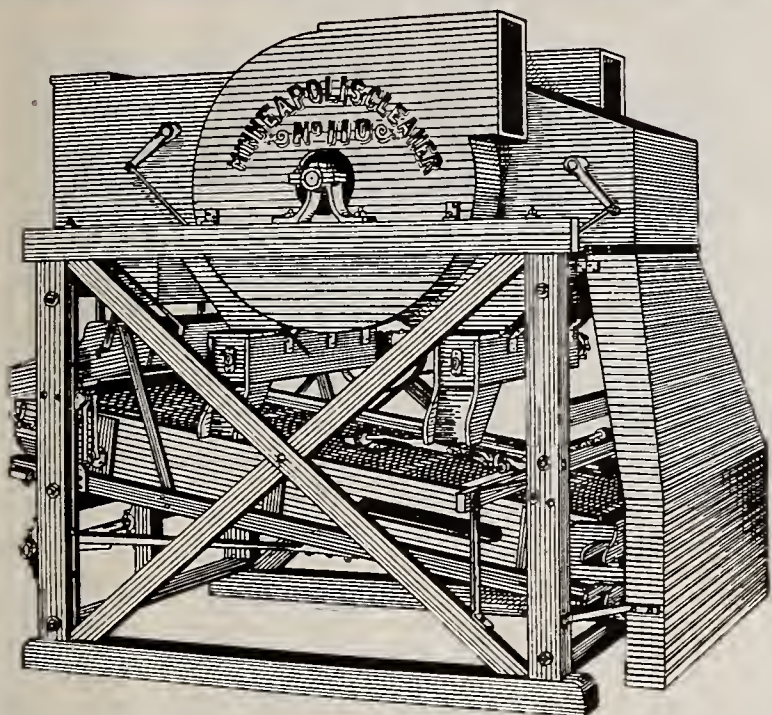
Established 1856

CHICAGO OFFICE: H. E. Furnas, 167 Dearborn Ave.
MINNEAPOLIS: W. E. Sherer, 3 Chamber of Commerce
KANSAS CITY: J. N. Heater, Hotel Savoy



SOMETHING DOING

When Cleaning Either Grain or Flax with an
Owen's Combination Flax and Grain Cleaner



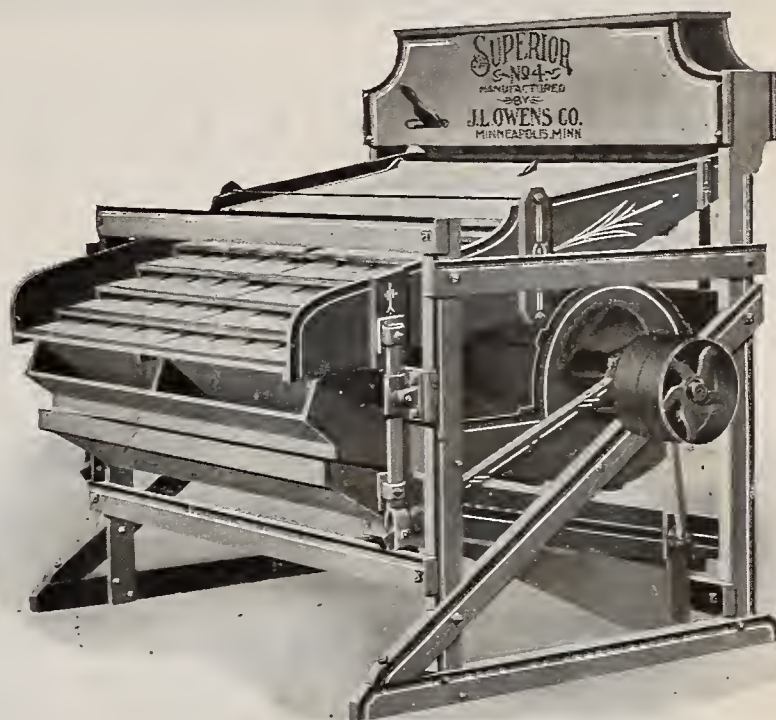
Better made, runs easier and will last longer than any combination machine made.

Write for Complete Catalogue

J. L. OWENS CO. 615 SUPERIOR ST. S. E. MINNEAPOLIS, MINN.

SUCCOTASH

Can be Separated with a
SUPERIOR No. 4

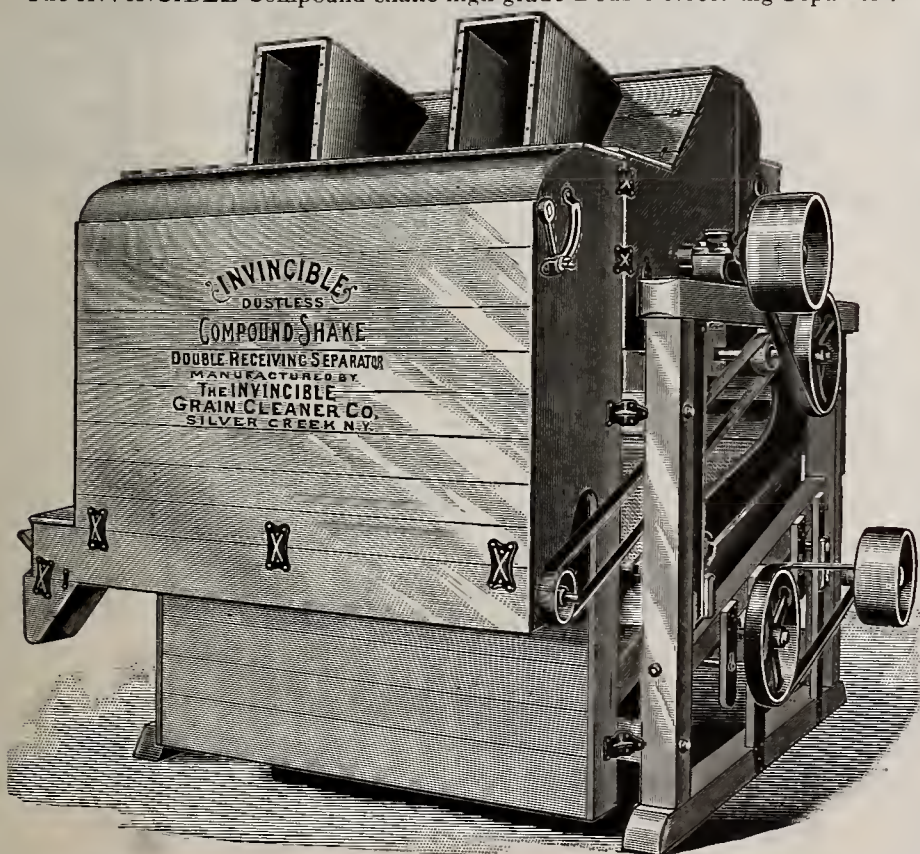


Positively the BEST and MOST PERFECT SUCCOTASH SEPARATOR made, and will hold its own for general purposes, cleaning wheat, oats, barley, rye, flax, corn, beans, peas, seeds of all kinds. Requires but one horsepower.

Order one on 30 days' trial.

GET THE BEST

The INVINCIBLE Compound shake HIGH-GRADE Separators.
No shake, no tremble, run perfectly steady. Can be placed anywhere in the elevator.
The INVINCIBLE Compound shake high-grade Double Receiving Separator.

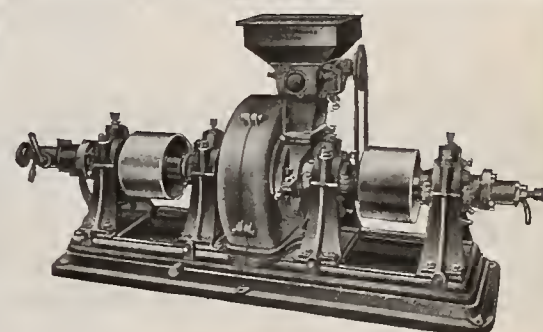


INVINCIBLE GRAIN CLEANER COMPANY
SILVER CREEK, N. Y., U. S. A.

— REPRESENTED BY —

W. J. Scott, 406 Traders' Bldg., Chicago, Ill.
Edward A. Ordway, 612 Exchange Bldg., Kansas City, Mo.
Chas. H. Scott, 307 So. 3d Street, Minneapolis, Minn.
J. N. Bacon, Blacherne Block, Indianapolis, Ind.
N. B. Trask, Lochiel Hotel, Harrisburg, Pa.
Portland Iron Works, Portland, Ore.

IT STANDS ALONE



Monarch Attrition Mill

Superiority is apparent to everyone who will examine our mill carefully and compare it with any other feed grinder on the market. And when it comes to a working test the Monarch is so far ahead that it wins in a walk.

Will You Investigate To-day?

Simply let us know that you are in the market for a feed grinder and we will prove to you that you cannot afford to buy any other mill. We will show you how the Monarch saves power, the great capacity it has and the fine work it does.

Our Catalogue

describes the mill fully. It tells why the Monarch has phosphor-bronze interchangeable bearings; cable-chain rollers; double movable base; safety spring; quick release; relief spring; special adjustable three-pulley drive; hammered steel shafting; ball bearings and other exclusive features. The book is yours for the asking, or you can have a mill on trial if you prefer.

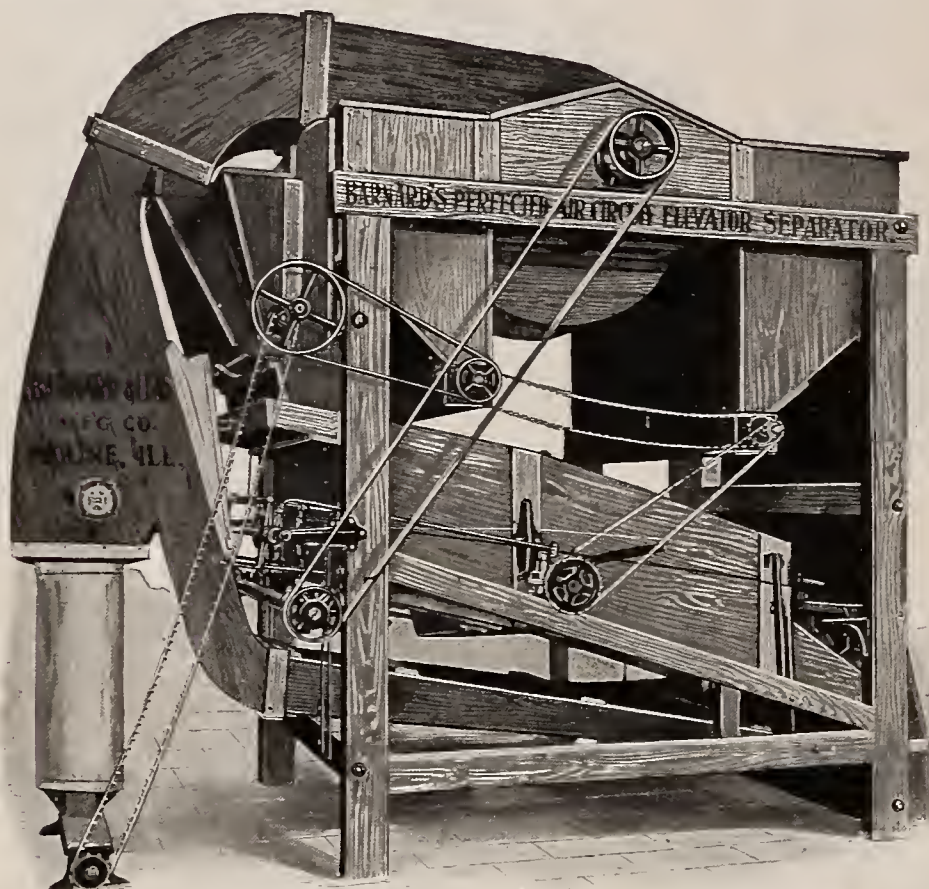
SPROUT, WALDRON & CO.

Northwestern Branch:
22-23 and 30 Corn Exchange, MINNEAPOLIS, MINN.

Box 320, Muncy, Pa.

Barnard & Leas Mfg. Co.

A Successful Separator



Barnard's Perfected Air Circuit Elevator Separator
With Sieve Cleaning Device

Barnard's Perfected Air Circuit Separator

makes the best air and sieve separations of any machine on the market.

It requires no dust collector, but collects and saves all the dust and screenings within itself.

It is also provided with our new sieve cleaning device which results in keeping the sieves perfectly clean at all times and insures positive and uniform work.

The machine is entirely automatic and requires almost no attention.

We make a full line of Separators, Feed Mills, Corn Shellers and Cleaners, Oat Clippers, etc.

We furnish everything necessary to thoroughly equip elevators of all kinds and capacities.

Write for further particulars.

MO LINE



ILLINOIS

SEEDS

THE ALBERT DICKINSON CO.

.....DEALERS IN.....

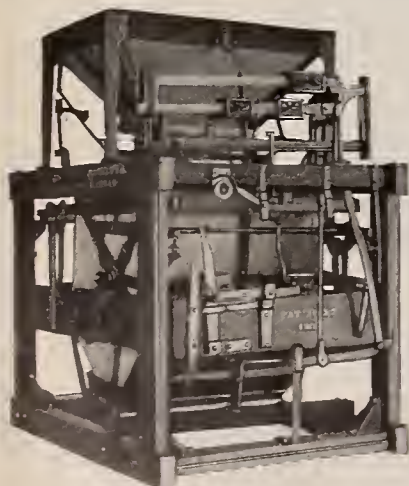
GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,
PEAS, POP CORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.
CHICAGO, ILL. BRANCH: MINNEAPOLIS, MINN

APRIL

"GRAPHITE"

A SPECIAL ILLUSTRATED NUMBER
CONTAINING SEASONABLE TALKS ON
GOOD PAINT AND GOOD PAINTING.
Copies free upon request.

Joseph Dixon Crucible Co., Jersey City, N. J.



HAS NO EQUAL

The McLeod Automatic Grain Scale

Weighs grain accurately while running into cars, bins or sacks.

Weights recorded. Reliable and durable. Prices reasonable. Sold on approval. You cannot buy a better scale at any price. Write for particulars.

McLeod Bros., Marietta, Kan.

We've Been Building Elevators For More Than Thirty Years and Are Still At It

Don't let your contract until you have received our bid on the job. We have the most complete line of up-to-date Elevator and Mill Supplies in the Southwest, and

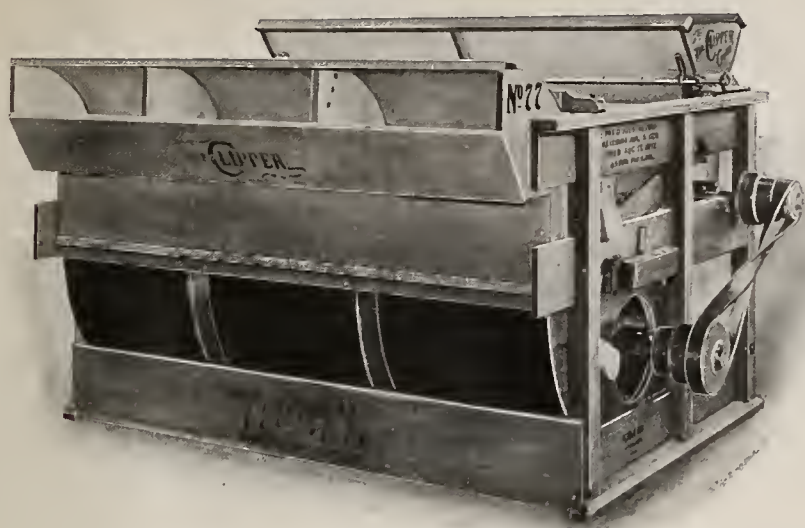
WE ARE AFTER YOUR BUSINESS

Our 450-page illustrated catalogue should be in your office, and we want you to have it. A postal will bring it. No order too large or too small.

Great Western Manufacturing Co.

Leavenworth, Kansas

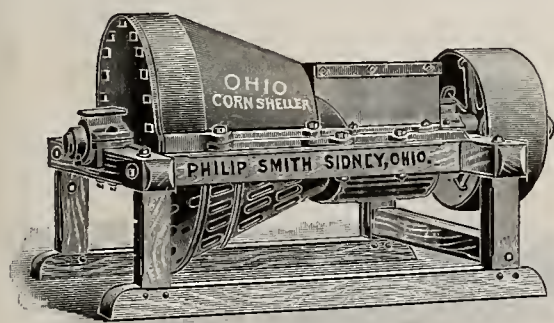
SAFE INVESTMENTS



If you are looking for a chance to invest your money where it will bring the largest returns, buy a "CLIPPER" Cleaner. The returns on this investment are in the form of lessened cost of maintenance—both in the amount of power required to operate the machine and the time and attention necessary to keep it in perfect running order. ∴ The machine shown in

this cut is especially adapted to handling wheat, oats, rye and barley and all coarse grain in large quantities, and it will require not to exceed three horsepower. It has triple air drum, insuring uniform air separations. This machine is a winner and cannot fail to give satisfaction. Write for further information and catalog.

A.T. FERRELL & CO., SAGINAW, W.S., MICH.



Corn Shellers

Corn Cleaners

Drags, Dumps, Etc.

When you want any machinery
or supplies for your elevator,
write us for prices ∴ ∴ ∴

THE PHILIP SMITH CO.
SIDNEY, OHIO



**Fairbanks
Scales**

won the Grand Prize at the Louisiana Purchase Exposition, St. Louis, 1904, for the very reason that you ought to use them,

They Are the Best

Fairbanks-Morse Gasoline Engine is the most economical power for Elevator or Mill use. By using it one man can often run the whole elevator.

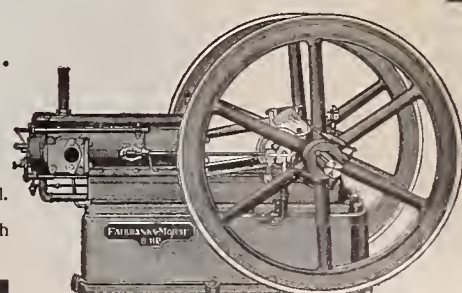
Send for Catalogue No. 544.

Fairbanks, Morse & Co.

SALESHOUSES:

Chicago, Ill.
Detroit, Mich.
Cincinnati, O.
Cleveland, O.
Indianapolis, Ind.
St. Louis, Mo.
St. Paul, Minn.
Louisville, Ky.

Minneapolis, Minn.
Kansas City, Mo.
Omaha, Neb.
Denver, Colo.
San Francisco, Cal.
Los Angeles, Cal.
Salt Lake City, Utah
Portland, Ore.



Send To-day For Our Treatise on Flax Cleaning

Here are a few pertinent questions concerning Flax:—

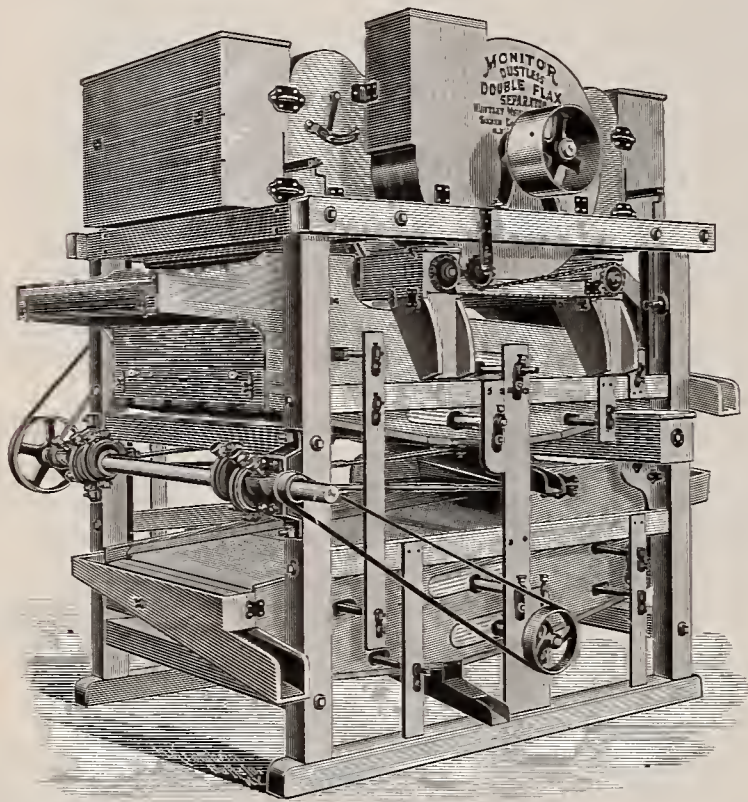
How much Flax did you handle last season?

What was the average number of pounds of dockage per bushel of Flax shipped?

How much did you get out of it?

How much freight did you pay on this?

Get a piece of paper and a pencil and figure these questions out—then write to us for our Treatise on Flax and let us tell you how it will pay you to clean this Flax and sell the screenings free of Flax, and how short a time it would take you to pay for a Monitor Flax Separator from the savings and how your barley and wheat would grade better and bring a better price if cleaned.



Here is the Monitor Dustless Double Flax Separator Style A

**Perfect Counterbalance, Steady
Running, Two Machines in One Frame**

Detailed descriptions of this machine, as all of the five styles of Monitor Flax Separators, will be found in our Treatise on Flax.

Here is what some of the users think of Monitor Flax Separators

The Flax Cleaner installed in our elevator by Honstain, Bird & Co. of Minneapolis, Minn., has given us the best of satisfaction both for flax and grain. It is a good cleaner.

FARMERS' ELEVATOR CO.,
Northwood, N. D.

Referring to your inquiry, the Flax Cleaner does very satisfactory work, and so far as we know fully reaches our expectations.

MARSHALL MILLING CO.,
Marshall, Minn.

In response to your inquiry of the 19th, we beg to advise that your Flax Cleaner has thus far given us satisfaction. We can heartily recommend it to anyone desirous of cleaning flax for crushing purposes.

GEO. N. VAIL & CO.,
Chicago, Ill.

Your favor of the 19th at hand. Our special Flax Cleaner we bought of you has given us good service in every respect.

ROBINSON ELEVATOR CO.,
Minot, N. D.

In reply to your inquiry, we beg to state that the Monitor Double Flax Separator No. 4B, that you sold us last fall, has been very satisfactory. We have not tested it up to its full capacity, but we are entirely satisfied with it.

J. A. BODY & CO.,
Winnipeg, Man.

Answering your favor of the 19th inst., we take pleasure in saying that we purchased one of your large Flax Cleaning Machines about a year ago, and the same has been used in our mills since that time. The machine does the work in a first-class manner and we find same entirely satisfactory.

RED WING LINSEED MILLS,
Red Wing, Minn.



HUNTLEY MFG. CO.

SILVER CREEK, N.Y. U.S.A.

BRANCH OFFICES

302 Traders Building, Chicago, Ill., F. M. Smith, Agent

316-318 4th Ave., South, Minneapolis, Minn., A. F. Shuler, Agent

121 Front St., New York, N. Y., J. W. Perrine, Agent

Berger, Carter Co., San Francisco, Cal., Agents

Hotel Savoy, Kansas City, Mo., H. C. Draver, Southwestern Agent



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XXIV.

CHICAGO, ILLINOIS, AUGUST 15, 1905.

No. 2. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

[For the "American Elevator and Grain Trade."]
**NEW SANTA FE ELEVATOR AT
ARGENTINE, KANSAS.**

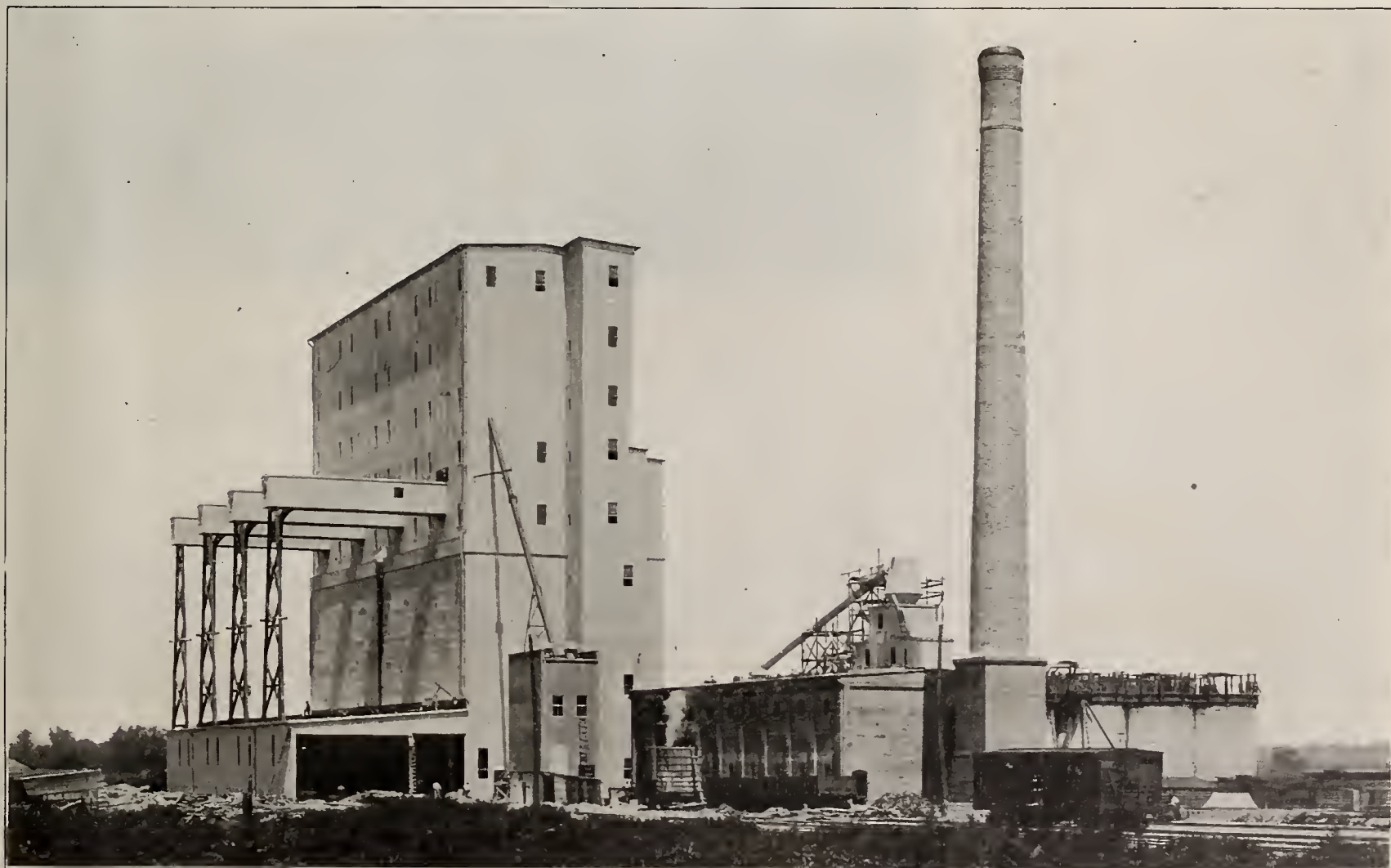
The new elevator of the Santa Fe Railway shown in the accompanying illustration is located in the yards of the Atchison, Topeka & Santa Fe Railway Company at Argentine, Kan., which is five

annex of 730,000 bushels' capacity; a 1,000-horse-power power plant, and a drying plant.

All foundations are of concrete, reinforced with steel rods. The foundations of the storage annex rest upon creosoted wood piles, and those of the working house consist of concrete piers, resting upon a concrete slab covering the entire surface of the ground.

building. The stairway, passenger elevator and transmission to cupola pass up through a frame tower 18 feet wide by 14 feet long, located at one end and extending the full height of the building.

The bin story is constructed of 2-inch laminated planking supported by the recognized type of heavy post and girder construction in the first story. Immediately above the bins is a five-story frame



NEW SANTA FE RAILWAY ELEVATOR AT ARGENTINE, KANSAS.

Plans and specifications by John S. Metcalf Co., Chicago; construction of working house and power plant by the Witherspoon-Englar Co., of Chicago; operated by the Harris-Scotten Company.

miles west of Kansas City, and as will be observed in reading the following description, it is a most complete and modernly equipped elevator plant in every sense of the word.

The elevator consists of a frame working house of 310,000 bushels' capacity; a concrete storage

The main elevator structure is 57 feet wide by 180 feet long and rises to a height of 154 feet above the track rail. It is flanked on one side by a cleaner shed 14 feet wide and on the other side by a car shed 47 feet wide, covering three tracks. Both of these sheds extend the full length of the

cupola extending the entire length of the building and supported through the bin story on posts which rest upon the first story framing, thus obviating any appreciable settlement and preserving alignment at all times. The structure is covered on the outside with galvanized corrugated steel

and roofed with composition felt and gravel. One receiving track extends through the building and one track through the car shed, hereinbefore described. The two remaining tracks in the car shed are used for loading purposes. The four loading spouts on the exterior loading track are served by means of 36-inch belt conveyors, each running in a suitable gallery and supported on a trestle frame from the foundation.

This elevator is equipped with 19 elevator legs, four of which are used for the purpose of receiving, four for shipping, eight in connection with the cleaning and clipping machinery, one for receiving grain from the scales and discharging same to a garner for the drier plant, one receives grain from the drier and distributes it back into the bins of the house and one elevator handles the screenings from the cleaning machines. A heavy car puller of the three-drum type is supplied and so arranged that cars may be handled in either direction on any one of the four tracks in connection with the plant.

There are three oat clippers, one wheat scourer and four separators, all of the largest size, located in the first story, together with a complete dust collecting system for receiving the discharge from these machines, with live air connections to the elevator legs, scales, garners and floor to sweep and discharge the same into furnace fronts of the six boilers. There are eight garners of 1,000 bushels' capacity each in the cupola, arranged to receive grain from the eight elevator legs and discharge it into hopper scales of 96,000 pounds' capacity, each supplied with recording beams. Grain discharged from the hopper scales is distributed to the bins by means of eight double-jointed and nine telescopic distributing spouts, either direct through the forementioned spouts, or by means of a 36-inch reversible belt conveyor running the entire length of the house. Shipping facilities consist of ten car-loading spouts of the latest design, arranged with Sandmeyer Loading Ends.

The power plant is contained in a brick building 47 feet 2 inches wide by 130 feet 8 inches long, divided by a brick division wall into engine and boiler rooms. The roof of power house consists of book tile supported on steel trusses and covered with composition tar and gravel roofing. The power plant consists of a pair of Corliss Engines deriving steam from a battery of six boilers of the return tubular type complete with all piping and connections, including heater and feed pump.

The plant is lighted by incandescent lights from an alternating current generator belted from an automatic high-speed engine. Ample fire protection is provided by fire pump with complete lines of fire service piping, hose connections and hose.

The working house and engine room will also be completely equipped with an automatic sprinkler system connected with which will be an independent fire pump. Water supply will be obtained from two deep driven wells, and the water will be stored in two reservoirs of concrete, each with a capacity of 60,000 gallons, built similarly to the concrete bins in the storage annex. Between the reservoirs is a concrete waterproof pump room, containing two pumps drawing from the wells and discharging to the reservoirs.

The drier building is located 40 feet from one end of the main elevator and between the two receiving tracks. This building is constructed entirely of concrete, being 15 feet wide, 27 feet long and 37 feet 6 inches high, and contains a Hess Drier complete with all fans, steam coils, independent engine and belt conveyor.

The storage annex, a portion of which is shown under construction at the right of the illustration, consists of twenty-four cylindrical concrete bins, and fifteen interspace bins. Above the bins will be erected a steel structure, with two steel galleries connecting it to the working house. Below the bins are four concrete subways leading under the railroad tracks to the basement of the frame elevator. Four 36-inch belt conveyors deliver grain to the storage bins, and four 30-inch con-

veyors return it to the several shipping legs.

The storage annex is fireproof in every particular, the structure above the bins being covered with corrugated steel, in which are set windows of wired glass, and roofs and floors are of tile. A tile partition with automatic fire doors is placed at the outer end of each of the galleries from the working house.

The smokestack is of radial brick and is 155 feet high, with 7-foot flue.

Plans and specifications for the entire plant were prepared by the John S. Metcalf Co., of Chicago, and contracts were placed by Mr. W. B. Storey, chief engineer, Atchison, Topeka & Santa Fe Railway at Topeka, Kan., construction being carried on under the supervision of Mr. Geo. E. Rex, assistant engineer, A. T. & S. Fe Ry. All foundations were put in under contract by C. A. Fellows of Topeka, Kan., who is also building the entire storage annex, which will be completed by October 1, 1905. The stack was built under direct contract with the Custodis Company.

The construction of the working house and

A BUNCH OF INSPECTORS.

It is just about two years since the "American Elevator and Grain Trade" had the pleasure of reproducing a photograph of Chief Inspector J. D. Shanahan of Buffalo surrounded by the employees of his office. There were but fourteen faces besides that of Mr. Shanahan in the group of 1903, against twenty in the present party. As in 1903, the picture to-day shows a group of fine-looking young men, all with intelligent, interesting and interested faces, as become a body of public employees of the right sort, who are, moreover, also treated right. A practical merit system obtains in the Buffalo department. The men get their places in the first instance only on the basis of every-day working capacity and not through a pull; and once on the payroll their names stay there until fate or some act of the men themselves removes them. In consequence, the Buffalo inspection and weighing department stands "way up in G"—a model that no state department has yet been able to reach.



EMPLOYEES OF THE GRAIN INSPECTION AND WEIGHING DEPARTMENT AT BUFFALO, N. Y.

power plant is an excellent example of what may be accomplished in a short period of time by the proper spirit of application, energy and push. Contract for this work was awarded the Witherspoon-Englar Co., of Chicago, on March 16, 1905, and possession of the foundations of working house was given them April 14. The building grew with such rapidity that on May 31 the roof rafters were in place; on July 17 the engines were started, and on July 30 the operators took possession and grain was received. The Witherspoon-Englar Co., while new in name, is composed of men who are both old in experience, having been engaged in the construction business all of their lives, and have recently purchased the plans, records and good-will of their former employers, Geo. M. Moulton & Co., their pioneers in this field of construction, and with whom they were associated a great number of years.

"American Elevator and Grain Trade" was led astray. Not by Statistician Hyde, nor Mrs. Chadwick. They kindly quoted what we recently said about the Toledo market, including something about the change in storage rates, which did not occur. Directors tried to secure lower rates, but elevator companies could not grant them, as elevation charge here is cheaper than Chicago, but paid on the arrival of the grain.—C. A. King & Co.'s Circular, July 21.

Two years ago it was said that Mr. Shanahan might be identified in the picture "as the only man among them wearing a visible mustache." Since then they have imported another hirsute appendage of this sort; and as Mr. Shanahan still wears his own, he may be seen seated, the third man, counting from the right to left of those occupying the chairs.

CANADIAN GRAIN ACT AMENDMENT.

The Canadian Parliament has amended the grain inspection act, the enacting clause of the amendment reading as follows:

In case of the lateness of harvesting or climatic conditions preventing the procuring of proper and representative samples of any quantity of grain of the crop of that year in time for the purposes of inspection thereof and action thereon at any meeting of the Grain Standards Board convened for the purpose of this section, the Board at such meeting may authorize a committee, of such number of its members as it may appoint, to meet at a later date and select such further commercial grades and samples as the character of the samples so procured may require; and the commercial grades and samples so selected by such committee shall be deemed, for all purposes of inspection and grading, to have been chosen by the full Board.

Objection was made to the use of the terms "commercial grades and samples," because the grades should be rated as on a "milling" rather

than on a "commercial" basis. However, as the bill was thought to favor the farmers' side of the business it was passed.

FIGHT AGAINST THE NEBRASKA ASSOCIATION.

The attack made upon the Nebraska Grain Dealers' Association by T. D. Worrall of Lincoln, with the taking of direct testimony by him at Wahoo, Lincoln, etc., took a new turn on July 18, when the Omaha Elevator Company, one of the defendants, filed at Blair, Neb., an order granted in chambers by Judge Sears in Omaha on a petition asking for the removal of the case from the District Court of Washington County to the United States Circuit Court at Omaha.

On August 3 the attack took still another form, when the attorney-general of Nebraska filed at Lincoln a petition with the Supreme Court asking for a dissolution of the Association, alleging that "certain grain and elevator companies doing nine-tenths of the grain handling business in this state have joined forces to control prices and force railroads to grant rebates to members." The temporary injunction order was granted, the court requiring "all of the members to refrain from doing any of the acts complained of as in restraint of trade." The attorney-general further demanded the forfeiture of the franchises of the corporations which have been parties to what he calls a conspiracy among the grain men. He swears that they "conspired to pool and fix prices for the purpose of preventing competition; that the officers of the Association withhold the benefit of their agreement from shovel houses and elevators off the right-of-way, which are run by farmers; that the prices were absolutely fixed at secret meetings; that the volume of trade has been controlled; that penalties have been imposed for violations of the agreement by members and that the blacklist has been resorted to." No date has been set, so far as we know, for hearing of a motion to dissolve or to make permanent this injunction, the court being now on vacation.

It is said by Nebraska newspapers that three prominent line houses, controlling nearly 200 elevators, lately members and active in the Nebraska Association's affairs, have pulled out of it; but there is no indication that the Association will "quit."

Added to his other performances in this connection, it is said T. D. Worrall of Lincoln, who inaugurated the fight, will publish a book telling what he knows of association work in Nebraska.

PUBLIC INSPECTION IN MISSOURI.

Whenever and wherever in Missouri the Railroad and Warehouse Commission of the state may have established grain inspection and weighing departments there public weighing and inspection is compulsory, according to an opinion rendered recently by Attorney-General Hadley, defining the powers of the Commission under the statutes relating to the inspection and weighing of grain in Kansas City, St. Louis and St. Joseph, the three cities where the Board has established grain inspection. A synopsis of the opinion as given out by the Board on July 17 is as follows:

"Attorney-General Hadley holds that wherever the Railroad and Warehouse Commissioners have established state grain inspection, warehouses of 50,000 bushels' capacity or more are declared to be public warehouses, and all grain going into or coming out of them is required to be inspected and weighed, certificates of grade and weight being issued by the state grain inspection department, which is supervised by the Board of Railroad and Warehouse Commissioners; that is to say, on all grain going into public warehouses the inspection and weighing by the state grain inspection department is compulsory, but on grain handled in these cities, not going into public warehouses, inspection and weighing is not required; but if there be an

inspection it must be by the state inspection department."

This construction of the law will not prohibit the supervision of weights at Kansas City by the Board of Trade, the chief of whose weighing bureau has authority to order any elevator owner to cease weighing grain until his scales are put in proper condition for correct weights. It is the chief's business, also, to investigate shortages due to leaking cars or any other cause. His assistants work alongside of the weighmen of the state or of the elevator owners.

JOHN F. COURCIER.

John F. Courcier of Evansville, Ind., has been elected secretary of the Grain Dealers' National Association, and there is every reason to believe the directors have made a most happy selection. Mr. Courcier has had a line of experience, as grain dealer, broker and commission man and as manager of grain companies, as well as grain association secretary and member of bodies bringing him



JOHN F. COURCIER, TOLEDO, O.,
Secretary of the Grain Dealers' National Association.

into intimate relations with traffic officials, to fit him for handling the work likely to fall to his lot in this position. Moreover, his home people speak of him as a practical and forceful man—a reputation that a brief resumé of his business career seems to fully warrant.

Born at Leopold, Perry County, Ind., on June 17, 1874, he lived the life of a farmer's boy from 1879 to 1886, when his father began to initiate him into the mysteries of the grain trade at Chrisney, Ind. Graduating from the common schools in 1888, he continued to work with his father in grain, hay and farm implements until 1895, in the meantime, however, taking a five months' course in the Jasper Business College in 1890 and a three months' course in the Perrin Shorthand Institute at Detroit in 1891.

In 1895 he became associated with the McCormick Harvester Machine Co. as canvasser, but was promoted the year following to a place in the office of the company at Evansville, where he remained until 1888. In this year he re-entered the grain and hay business as chief clerk for Wm. Field & Co. and was subsequently given a quarter interest in the business, with which he continued his connection until the retirement of Mr. Field in 1901. He then engaged in the commission and brokerage business on his own account, but in December, 1901, was offered the position of manager of the grain department of W. H. Small & Co. at Evansville. He accepted and took charge on February 2, 1902. In 1904 the arrangement was renewed at increased compensation and was continued until his call to the National Association,

on July 22 last. Having accepted the Association's offer, he immediately closed his affairs at Evansville and within a week was in Toledo and at work.

In addition to discharging the duties of the position of manager of the grain department of W. H. Small & Co., Mr. Courcier was active in matters of public interest in Evansville, particularly such as related to traffic arrangements and the general upbuilding of the reputation of Evansville as a market. He was secretary of the Southwestern Indiana Grain Dealers' Association, secretary of the executive committee of the Evansville Traffic Bureau and a member of the Evansville Business Men's Association. His activities have, however, all been along business lines, having never taken any more than a local interest in politics. He was recommended for the position of secretary-treasurer of the Grain Dealers' National Association by a large number of people connected with the grain trade of the country and was especially well recommended by the various commercial organizations and prominent citizens of Evansville, and the directors were unanimous in their choice.

Mr. Courcier's idea of the province of the National Association, as he writes us, is the elimination of unbusinesslike methods now existing in the trade. Politics in the organization is an especially repugnant idea, and he finds, as the immediate impression obtained by contact with its present officers and directors, that an earnest endeavor will be made to work the Association out from under its influence. Personally, too, Mr. Courcier says he is deeply impressed with the integrity and the earnestness of the officers of the Association in the work they have before them in uplifting the Association, and that they are disposed to take advantage of every opportunity to place the organization on a sound working basis.

[For the "American Elevator and Grain Trade."]

HOW THE CARD BIDS SYSTEM WORKS.

BY POPE & ECKHARDT CO.

In your last issue we notice a communication by Mr. E. W. Seeds on a subject to which much intelligent thought can be given, and as the result of an exchange of views, perhaps, the grain trade, particularly the country end of it, would be much benefited. In our humble opinion, the growth of the custom and practice of selling grain on card bids and as "No. 3 or better" is decidedly against the best interests of the country grain dealers most of the time. While there is one feature in which it may be said we are more directly interested, namely, that in a measure it curtails the volume of business that is handled on commission and through commission merchants, nevertheless we wish to touch more particularly on those features which are most apt to injure the country grain trade.

First of all, we are of the opinion that it has a tendency to reduce the ambition and the mental capacity of the country grain dealer, who gradually works into the habit of noticing card bids wholly and solely, and thereby neglects to calculate for himself the price and the benefits that would accrue to him by the sale of the property on the market, freight and other expenses considered. The practice has grown to such an extent that we candidly believe many of the grain dealers fail to appreciate the actual cost, in freight and other expense, of moving a bushel of grain from their markets to the nearest available outlets.

The disposition to use card bids as a basis has done much in our opinion to draw away the attention of the dealer from the interest which he has in the cost of freight and in rates which apply from his station—whether they are fair and reasonable, or an unjust discrimination against him, or against his best outlet for the grain which he has to offer from time to time.

The card bids have had a tendency, in our minds, to make the grain dealer more or less of a clerk, working for those whose card bids are used, in the

disposition of the property which he has to offer. This is true because the card bids serve as a basis for making the purchase from farmers, and the property is then sold because the dealer is actuated by a desire to save the shipping margin on which he has calculated, and he is less inclined to view the conditions that would influence market values and the value of the property which he has to offer.

There are many opportunities occurring and recurring each year which give the intelligent and prudent dealer in the interior modes and means of disposing of his grain to much better advantage than to avail of these card bids. These latter are nearly always based on a fair margin for profit to the dealer, who finds in the market opportunities to turn the grain which he has bought from day to day, oftentimes at decidedly better profits than could be earned at full commission rates.

The merchandising of the grain as "No. 3 or better" has unquestionably resulted in a much more careless handling of the grain, and is one of the reasons, probably, why the large percentage and volume of grain that comes to this market is not good enough to be classed into the better, or contract, grades. First of all, as the seller gets no premium for the better grades than No. 3, there is no incentive to clean the grain or to handle it judiciously. It is a known fact that in a great majority of the elevators in the central grain territory, cleaning machinery is at a discount, and in building elevators very little consideration was or is given for the installation of such facilities; and yet a large volume of the grain handled in nearly all this territory could with a little careful handling be much improved; and even though the premiums for the better grades are at times only moderate, yet the cost of cleaning and a fair profit for the trouble would probably be the average result.

This mode and method of handling the grain also affects the farmer. In fact, the practice seems to have brought about also a method whereby the dealers at a great many interior stations take good, bad and indifferent grain from the farmers, all at one price, arguing that if one farmer gets a certain price for a specific quality of grain they cannot do otherwise than pay his neighbor the same price, be the grain much better or much worse; in fact, the farmers are dissatisfied unless the same price is available to them all, regardless of the quality of the property. This theory seems to us to be entirely wrong; and if it is at all justified, certainly there is no need for "seed specials" or recommendations to the farmer to produce a better quality of grain. It is true that the seed and grain specials have been inaugurated on the theory that a much larger yield will be available and that they are therefore desirable to the farmer; but at the same time the object of these specials has been to demonstrate to the farmer that a better quality of grain will give better yields and better results to him, so that after all the matter of quality is as much a consideration in these object lessons to the farmers as is the increased production.

It is our judgment that grain should be bought from the farmer on its merits, with proper and sufficient discount for the poorer grain from value of the good, and sufficient extra in price paid for especially desirable lots, so that the incentive to raise the better grain would be created in that way; and then in exercising their best judgment the dealers would unquestionably do themselves more good by handling the grain on its merits, and not, as has been in vogue for some time past, to give to the buyer all the benefits of the good quality in the sale of the property as "No. 3 or better."

The largest track buyers send no information to the interior dealers as to markets, changing of freight rates, foreign news or other important matters. Their theory seems to be, "The denser the ignorance of the dealer, the greater the track buyer's chance for profit. Let the countryman read about big pumpkins in his county paper and be satisfied."

A grain dealer at St. Joseph, Mo., on July 17 forwarded a carload of seed wheat to the Calgary

Colonization Company of Calgary, Alberta, Can. The grain was from Kansas, and was Turkey red, which is said to be especially adapted to the northern Canadian fields. The wheat will be sowed as soon as received.

ARTHUR R. SAWERS.

If not the best fellow in the world, then one of the best, is the verdict of the friends of Arthur R. Sawers, who after a sojourn of upward of three years in the grain business in the South is again in Chicago, with offices in 510 Postal Telegraph Building.

Mr. Sawers was a prominent figure in Chicago grain circles before his departure, and came to this city from Cincinnati, Ohio, in 1888, becoming a member of the Chicago Board of Trade.

He was first associated with Irwin, Green & Co., later with Lasier, Timberlake & Co. and then he took an interest in the Calumet Grain and Elevator Co.

He was a firm friend of the Grain Dealers' National Association and served as a director for a number of years, contributing much of his time



ARTHUR R. SAWERS, CHICAGO.

toward making its early years a success. He was prominent in the arrangements of the Des Moines meeting, which has passed into history as perhaps the most successful general meeting in the history of the Association.

In the South Mr. Sawers spent about two months in El Paso, Texas, working wheat to Mexican millers and corn and oats to the Arizona and New Mexico trade. He then spent two years in Memphis making a specialty of supplying wheat and corn to the Southeastern milling trade.

Mr. Sawers brings a wide experience to his business in Chicago, which will be along general grain handling lines.

INSPECTION FEES INCREASED.

The Milwaukee Chamber of Commerce has authorized an increase in the cost of inspection and weighing in that market, the advance being from 30 cents per carload to 35 cents. As the size of cars has increased from 50 to 100 per cent since the fee of 30 cents was established, there is really no injustice in the advance, which is needed to keep the department on a paying basis.

Send us the grain news from your neighborhood.

Evidence that Southern Indiana farmers are holding their wheat for the Society of Equity's \$1 is apparently evidenced by the slow movement of wheat from the farms in spite of the large amount thrashed and the good prices offered by buyers.

MILWAUKEE AS A BARLEY MARKET.

[From a paper by W. P. Bishop, read at the annual meeting (1905) of the Wisconsin Grain Dealers' Association.]

This subject should be of interest to the majority of Wisconsin grain dealers, for Milwaukee is the natural market for the principal barley producing section of the state, and Milwaukee prices are generally the basis for operations at those points which find a market elsewhere. It is reasonable also to expect that Wisconsin grain men should take pride in having a stable market in the metropolis of the state for its chief product. The Milwaukee barley market has kept pace with the growth of the barley business in the West until it has become the greatest primary market for immediate delivery and a market where grain dealers in all sections of the Northwest can find a market at all times for barley of all kinds, grades and descriptions.

The Milwaukee market has always been foremost in fostering the barley business by furnishing information to shippers in regard to handling barley and providing facilities for judicious and profitable disposition of it, which has resulted in building a market that is second to none in the commercial world. One other market may show larger annual receipts of barley than Milwaukee, and possibly larger speculative transactions, but in actual daily spot sales for immediate delivery from first hands, it is safe to say that Milwaukee exceeds all other markets.

There has been a continual growth of the barley business in Milwaukee for the past fifteen years, and during that time the annual receipts have nearly doubled and now aggregate about eighteen million bushels annually, or about one-eighth of the annual crop of the United States. This large quantity of barley is drawn from six states, but principally from Wisconsin, Iowa, Minnesota and South Dakota, and is being brought to Milwaukee in the face of sharp competition. Other markets have grown, due to the development of tributary territory mainly, but the growth of the business in Milwaukee is due to increase in its shipping business and enlargement of the demand from local malting industries. Although the greater portion of the receipts are from first hands, yet a large percentage comes from other markets, being diverted here seeking the market affording the best means for final distribution.

The trend of all lines of business is to bring the producer and the consumer nearer together and this tendency is having a marked influence upon the grain business in the West, which eventually will result in a revolution of past and present methods of handling barley. Fifteen years ago practically all of the barley raised in the West was shipped to Eastern markets, or to maltsters located in the East, in order to find an outlet for it, that being the only means of disposition, but the growth of barley production in the West has developed a vast malting industry which is continually increasing and eventually may become sufficient to consume the entire Western crop; for it is more profitable to manufacture malt near the barley fields and supply Eastern consumers with the product than to ship the raw material. There are in Milwaukee about fifteen plants for the manufacture of barley malt for shipment and for local use, with an aggregate malting capacity of about fourteen million bushels of malt per annum, or sufficient to use nearly all the annual barley crop of Wisconsin. The malting capacity of Milwaukee is increasing yearly, due to favorable conditions existing here for securing the different qualities of barley required for malting profitably. This market draws barley from such a diversified territory that maltsters can generally secure on this market any or all kinds or qualities of barley needed to manufacture the quality of malt desired. This outlet naturally results in making a market where all descriptions of barley can be sold to advantage at all times.

The barley shipping business is also a great

factor in this market and shows continual growth, being the largest the past year, with the exception of one year, in the history of the market, and amounting to over ten millions of bushels. The demand from this source takes all qualities and descriptions of barley, depending upon the needs of Eastern consumers, and during the shipping season is continuous. Shipments are made by lake eastward, by across-lake lines in bulk and by car ferry in car lots, also all rail. This class of business requires large elevator capacity, with which the market is well equipped, the total public and private elevator storage capacity of Milwaukee being about fifteen million bushels, which, although not fully adequate to meet all requirements, is sufficient to admit of handling a vast amount of business with promptness and dispatch.

MORE BLUFF.

The latest bluff of the Christie aggregation at Kansas City, now known as the "National Board of Trade," is the announcement that there will be incorporated the National Grain and Elevator Company, with capital of \$100,000 (sic), for the pur-



CAPT. I. P. RUMSEY, CHICAGO.

pose of "furnishing safe and permanent facilities for the handling of grain on the National Board of Trade."

The Kansas City Journal, with the "childlike and bland" innocence that has hitherto characterized its exploitation of that unblushing gambling corporation, the National Board of Trade, explains to its honest readers that—

"It is intended to conduct a general grain and elevator business. The National Board of Trade has already made arrangements for the temporary use of a large elevator in Kansas City, and in a short time expects to be able to handle all cash grain business with facilities fully as good as those of any other board in the country.

"Stock in the National Grain and Elevator Company will be owned largely by Western millers and grain shippers. The National Board of Trade will have no pecuniary interest in the new enterprise, the directory having decided that to do so might make the Board a competitor to a certain extent with its own members. The stock of the new company is divided into shares of \$100 each, which are being sold at face value. The men behind the project prophesy that it will earn from 10 to 20 per cent dividends from the day it commences business."

The Pure Seed and Plant Company of America has been incorporated at Indianapolis. The company proposes, among other things, "to eradicate weeds from the farms of America, to prevent adulteration of seeds, grains and food products, to have laws passed to prevent the spread of weeds, and to see that they are enforced until a national

curse—harmful weeds—is eradicated from the land." The capital is \$250,000, divided into shares of \$10 each, and among the directors is James A. Everitt, famous as the Society of Equity's papa.

THE WHITE & RUMSEY GRAIN CO.

In February of this year the White & Rumsey Grain Co. of Chicago was organized to carry on a general grain business, with officers consisting of I. P. Rumsey, president, and Geo. A. White, secretary-treasurer. Portraits of these two gentlemen are shown herewith. Few men in the grain trade are as well known to the Chicago as well as to the Eastern and Western grain dealers. Captain Rumsey, who is now one of the oldest members of the Chicago Board of Trade, and is filling out his years with increased usefulness, was the prime mover in the organization of the new firm, which, by the establishment of their large elevator recently completed at Kankakee, is intended by him to help to promote better conditions in the trade.

Mr. White was born and raised in Ohio, entering the grain business when but fifteen years of age at Toledo. About five years ago he organized the Churchill-White Grain Co. and built the large transfer elevator now standing at South Bend, Ind., and a line of elevators in Northern Illinois.

The firm's new elevator at Kankakee is expected to be in operation by the middle of August. It is a transfer and storage as well as a cleaning house, with storage capacity of 200,000 bushels and transfer capacity of about 50 cars per day. It is modern in all respects, equipped with Monitor Cleaners, and in excellent situation to handle grain from Illinois and west of the Mississippi River. The location affords every facility for reaching the East and South and it may be at once and safely assumed that Kankakee grades and weights will be uniform and reliable.

RECIPROCAL DEMURRAGE.

[A paper read at the annual meeting of the Michigan Hay Association, 1905, by J. A. Heath of Lenox.]

Owing to circumstances beyond my control, it is my fortune to address you to-day, as it has been on several former occasions, on a subject appertaining to the mutual relations existing between carriers and shippers of farm commodities. From this fact you might presume that I hold communistic views with reference to corporate interests. Kindly let me disabuse your minds of any such idea. I fully appreciate what the extension of the railway mileage and the establishing of great trunk lines, thus simplifying interstate shipments, has meant toward the development of these United States. Railway extension, undoubtedly, has proved the most potent factor that has placed our country in the front rank of the nations of the world, and instead of curtailing the present development of great corporations controlling thousands of miles of railroad lines, I would favor aiding in every way this process of consolidation, in the hope that in the not distant future the entire railway mileage of the country will be managed by one gigantic corporation. When that time comes national legislation will be both possible and necessary, and that will place a fair valuation on the entire railway investment of the country and allow a fair and equitable return upon which freight rates and passenger fares will be based. Then the annoying and totally unnecessary difficulties caused by having a Southern, a Western, an Eastern and a Canadian classification will be eliminated, and the heavy losses that under present conditions result to the trade through individual lines not prorating on through business will be done away with. That bugbear of the trade known as "Freight Congestion" would become a thing of the past. Every freight car in the country would be available for shipment to any point, and the contingency would not arise, as is the case under present conditions, where sidetracks will

be full of empty cars, and with our warehouses bursting with commodities ready for shipment we appeal to the railroad people for the privilege of loading some of these cars, and be informed that they belong to foreign roads and cannot be used for shipment except for shipments to points that will give the company owning the cars a haul.

Under present conditions the tracing of shipments is a delusion and snare, more often being a damage than benefit. Under a single ownership we might expect more effective and desirable methods of tracing shipments. Even the uniform bill of lading might cease to be a nightmare, and would at least become a reality. In fact, while the millennium possibly would not have arrived for the shipper, conditions could not but be better than can be expected with the present diversity of interests. Unfortunately, we must look on conditions as they exist rather than on what they might be, and that being the case, I desire to call your attention for a short time to the subject of "Reciprocal Demurrage."

In considering this subject, I take it for granted



GEO. A. WHITE, CHICAGO.

that more is expected of the term "Reciprocal Demurrage" than is ordinarily understood as being covered by these words; inasmuch as they relate to certain per diem charges where cars are unduly delayed in loading or unloading. I would call your attention to the broader meaning of the term; namely, the rights of shippers where delays and consequent damages result through failure of the railroad companies to furnish equipment when ordered for the transportation of commodities. Beyond a question of doubt we must concede the right of railroad companies to collect per diem and car service charges. Courts have time and again so decided, and the actual application of the right has undoubtedly worked to the benefit of the regular and legitimate shippers, as well as to the railroad companies. In fact, without the right to make and enforce reasonable rules and regulations, the railroad companies would be at the mercy of their customers. To quote from a recent court decision: "It is a matter of the highest public interest that they should be accorded this right and power. Individual convenience should be subordinate to the public good, which demands expedition, regularity, uniformity, safety and facility in the movement of the freight of the country, which must of necessity be materially obstructed if individual consignees are allowed without let or hindrance to convert freight cars on their arrival with cargoes of freight upon their sidetracks into warehouses for the storage of freight at the suggestion of their convenience or interest." But, on the other hand, the highest courts of the land have just as clearly and decidedly ruled that, "The

obligation of common carriers to transport freight arises on tender of same for transportation in the usual way without any special agreement. Further, the selection of either goods or customers is forbidden to common carriers. Further, it is the duty of common carriers to furnish sufficient equipment to meet the reasonable demands of its customers." Again, citing the language of the court, we note, "Shipments shall be moved with reasonable dispatch, acts of Providence and accidents excepted."

With the rights of carriers and shippers so clearly defined by the highest authority in the land, it would certainly seem as though there was a clear field for a fair and just reciprocal arrangement that would compensate the railroad companies for delay in loading and unloading equipment, and, on the other hand, that shall remunerate the shipper for delay in furnishing cars to transport the goods promptly and compensate the receiver for delays in movement as well as after arrival at destination.

The equitable features of such a law are apparent. The carrier and owner of property occupy reciprocal relations. The shipper may hold the car beyond the free period if he is willing to pay a specified amount; the carrier can do likewise. The effect of such a law is that the rights, duties and liabilities of the parties become mutual, and each is compensated in the same manner for his neglect in delaying, his wilful withholding of facilities.

But with our rights thus clearly defused, where is the solution? The railroad companies will make a strong fight for the maintenance of present conditions. The shipping interests, with right and justice on their side, lack the necessary cohesiveness to meet the fight of the railroad companies. Clearly what the trade requires is more effective organization. Much has been accomplished in this direction, but we still lack that unity of interest, that singleness of purpose, that constant desire upon the part of every individual member to work for "all and not for self." We come to these conventions honoring some good men by electing them to the official positions, then we go home and expect these men to accomplish, unaided by assistance from the rank and file, measures that should have the constant effort of every interested person, whether he is a member of any particular association or not.

This condition of affairs was emphasized during the past winter when the fight was on to obtain some relief through the legislature of the state of Michigan in the way of the passage of a reciprocal demurrage law. A few men put forth a mighty effort, and an immense amount of work was accomplished with the very small means to work with.

We would like to ask the gentlemen who are here to-day: How many of you made any effort toward the passage of this measure by writing or personally soliciting the vote of the member of the House of Representatives or Senate from your district? How many of you will go home and, when the time comes for electing a new legislature, see to it that men who are likely to be favorable to the interests of the shipping public as against the corporations will be elected to these positions? Does it not occur to you as being a strange coincidence that the committee on railroads of the senate of the state of Michigan, that has absolute power over all legislation connected with the transportation interests, did not contain among its members a single shipper? Can we expect to obtain any relief so long as this condition of affairs continues to exist? You will remember the old adage, "The Lord helps them that help themselves," and one thing is certain, that the shipping interests of Michigan will never obtain any relief from the legislature until they elect to its membership men who are conversant and familiar with their needs. Let us work early and

late along these lines, and the first forward step will have been taken toward bettering the conditions which we have to work with.

BOWLUS AUTOMATIC WEIGHING MACHINE.

This machine, which has been tested in practical use for the past two years, has been put on the market by the Bowlus Automatic Scale Co., Springfield, Ohio, under a strong guarantee that it will weigh accurately and automatically wheat, rye, oats, barley, shelled corn or any other kind of grain. While it is simple in construction, the material and workmanship are first class, insuring durability.

From the annexed illustration it will be seen that the machine is built along original lines and that it differs from other scales in design and



BOWLUS AUTOMATIC WEIGHING MACHINE.

operation. It may be placed in a grain elevator under a down spout or may be fed from a hopper under the elevator head. The grain flows into the small hopper at the top, which is stationary and bolted to the top of an angle steel frame. The outlet to this hopper is adjusted by means of a lever and ratchet to suit capacity desired. From this hopper the grain is directed into the middle or receiving hopper, where it accumulates until sufficient weight is stored to tip and open the trap in the bottom; at the same time the trap in the lower or weighing hopper is closed and locked. When the weight of grain in the weighing hopper is sufficient to tip the beam the trap in the receiving hopper is automatically closed, thus holding back the grain. The same automatic movement opens the trap in the weighing hopper and empties it. This trap remains open until a weight has accumulated in the receiving hopper sufficient to tip and close the trap, when it is ready for another filling.

The machine operates continuously and automatically until the supply of grain is exhausted or cut off. No power is required and the construction is such that the weight of the grain flowing through the machine is registered automatically. This feature eliminates the necessity of a weighman or other person to watch the machine when in operation. The flow of the grain is regulated at the

point where it enters the receiving hopper. A lever and ratchet permit the opening or closing of the orifice through which the grain leaves the top hopper, and it is thus possible to adjust the machine to the different speeds at which various grains will flow.

The counterpoise (weight beam) is arranged to dump in quantities of 250 pounds, an easy multiple of 1,000. It has been found in practice that this adjustment is satisfactory for elevator purposes under almost any condition. At 250 pounds per dump the machine is claimed to pass and weigh accurately any part or all of 60,000 pounds of wheat per hour. In the weighing hopper is placed a scale for ascertaining the correct weight of any remaining bulk of grain less than a full draft.

With reference to construction it may be said that the top frame is made of a single piece of angle steel, forged into shape, of sufficient strength to stand any strain to which the scale may be subjected without disturbing in the least the alignment of the bearings. The latter are made of hardened steel rollers, securely held in a cage, perfectly adjusted and very sensitive. They require no lubricant and are dustproof. The hoppers are made of galvanized sheet steel and are painted to prevent rust or corrosion.

The machine occupies but little space, 4x4 feet and 7 feet high, and can be installed by any first-class millwright, although the manufacturers will send a competent man to superintend the installation if the purchaser desires.

In addition to their standard weigher the Bowlus Automatic Scale Co. also build a weigher of the same style for bagging grain or feed in even bulk. This machine registers every bag as it is filled. In their advertisement elsewhere in this paper they offer to send catalogue and detailed description to any grain dealer who will write for them.

WORKING ON STATE RATES.

The problem of Illinois freight rates, which has been before the Railroad and Warehouse Commission for about three years, came up again in May; was put over until June, and then set for argument on July 12. Another decision may come—some day. The previous decision favored a reduction, but the opinion was never enforced—critics of the Yates' administration said because of politics.

An interesting phase of the hearing in May was the statement by representatives of one or two roads which have been going through the agonies of "frenzied finance" and are so heavily waterlogged that even in these days of immense railway business they find it all they can do to keep up the interest on their bonds, that a cut in rates would "bankrupt many Western roads." Therefore, shippers must keep on paying rates that will keep the derelicts afloat.

The existence of yellow fever in New Orleans has not affected the movement of grain and hay perceptibly as yet in Southern cities.

The first sale of Washington new wheat of the season was made at Lacrosse on July 15, when Dorman Bros. & Zaring sold 40,000 bushels of new blue stem wheat to the Northwestern Warehouse Company for 67½ cents a bushel, delivered at warehouse as soon as thrashed. This is several cents above opening price of last year, and better than the farmers had expected.

Alberta farmers began about August 1 to reap their winter wheat, which, it is said, has proved a great success. Five years ago there was practically no fall wheat grown, but during the past two years it has proved such a great success that this grain will become almost the sole crop of the newly formed province. The oat crop is equally wonderful, but not so much notice is taken of it. In places there are fields which will thrash over 100 bushels to the acre and already much of it was in head at the date named.

WISCONSIN INSPECTION AT SUPERIOR.

The new Wisconsin Grain Commission, composed of John D. Shanahan of Buffalo, N. Y., Homer Andrew of Superior and Milton F. Swanston of Michigan City, N. D., met on July 21 at Superior and organized by electing Mr. Andrew chairman and secretary of the Commission and Byron Kimball chief weighmaster and assistant secretary.

This commission was created by a law passed by the late Wisconsin legislature, which by its terms made it a misdemeanor for unauthorized persons to inspect grain in Wisconsin; but this provision was afterwards repealed in so far as to

wheat not fit for a higher grade in consequence of being of poor quality, shrunken, slightly damp or slightly musty, and test not less than 49 pounds per measured bushel. Rejected spring wheat shall include all spring wheat grown, badly bleached or for any cause unfit for No. 4.

PACIFIC.—No. 1 Pacific white wheat shall be Pacific white wheat, sound, dry, plump, and well cleaned, and test not less than 58 pounds per measured bushel.

No. 2 Pacific white wheat shall be Pacific white wheat, sound, dry and reasonably clean, and test not less than 56 pounds per measured bushel.

No. 3 Pacific white wheat shall be Pacific white wheat not fit for a high grade, but fit for warehouses and shall test not less than 54 pounds per measured bushel.

No. 1 Pacific red wheat shall be Pacific red wheat, sound, dry, plump and well cleaned and test not less than 59 pounds per measured bushel.

No. 2 Pacific red wheat shall be Pacific red wheat,

shrunken or discolored, and test not less than 54 pounds per measured bushel.

No. 2 mixed winter wheat shall be all white and red wheats mixed, equal to No. 2 red winter wheat in all other respects.

No. 3 mixed winter wheat shall be all white and red wheat mixed, equal to No. 3 red winter wheat in all other respects.

DURUM.—No. 1 durum wheat shall be bright, dry, sound and well cleaned, composed as wheat commonly known as macaroni.

No. 2 durum wheat shall be sound, dry, reasonably clean, may be slightly bleached or shrunken, not good enough for No. 1.

No. 3 durum wheat shall include all wheat badly bleached, shrunken or smutty, not good enough for a higher grade.

Note B.—In cases of mixture of other varieties of wheat with the regular Superior grades of spring wheat, or with each other, it shall be graded according to the quality thereof, and classed as one, two and three mixed wheat, with inspector's notations describing same.

CORN.

YELLOW.—No. 1 yellow corn shall be yellow corn, sound, dry, plump and well cleaned.

No. 2 yellow corn shall be 90 per cent yellow corn, dry, reasonably clean, not plump enough for No. 1.

No. 3 yellow corn shall be 90 per cent yellow corn, reasonably dry, reasonably clean, but not sufficiently sound for No. 2.

No. 4 yellow corn shall be 85 per cent yellow corn, not wet or in heating condition, that is unfit to grade No. 3 yellow.

WHITE.—No. 1 white corn shall be sound, dry, plump and well cleaned.

No. 2 white corn shall be 95 per cent white corn, dry, reasonably clean, but not plump enough for No. 1.

No. 3 white corn shall be 90 per cent white corn, reasonably dry, reasonably clean, but not sufficiently sound for No. 2.

No. 4 white corn shall be 90 per cent white corn, not wet or in heating condition, that is unfit to grade No. 3.

MIXED.—No. 1 mixed corn shall be mixed corn, sound, dry, plump and well cleaned.

No. 2 mixed corn shall be mixed corn, dry, reasonably clean, but not good enough for No. 1.

No. 3 mixed corn shall be mixed corn, reasonably dry, reasonably clean, but not sufficiently sound for No. 2.

No. 4 mixed corn shall include all mixed corn, not wet or in heating condition, that is unfit for grade No. 3.

OATS.

WHITE.—No. 1 white oats shall be white oats, dry, sweet, clean and free from other grains, and shall test not less than 3 pounds per measured bushel.

No. 2 white oats shall be $\frac{7}{8}$ white oats, dry, sweet, reasonably clean, practically free from other grains, and shall test not less than 31 pounds per measured bushel.

No. 3 white oats shall be $\frac{7}{8}$ white oats, dry, sweet, reasonably clean, practically free from other grains, and shall test not less than 29 pounds per measured bushel.

No. 4 white oats shall be $\frac{7}{8}$ white oats, not sufficiently sound and clean for No. 3, and shall test not less than 25 pounds per measured bushel.

MIXED.—No. 1 mixed oats shall be dry, sweet, clean, and free from other grains, and shall test not less than 32 pounds per measured bushel.

No. 2 mixed oats shall be dry, sweet, reasonably clean, practically free from other grains, and shall test not less than 31 pounds per measured bushel.

No. 3 mixed oats shall be mixed oats that are merchantable and warehouseable, reasonably clean, and not fit for a higher grade.

CLIPPED WHITE.—No. 1 clipped white oats shall be white oats, dry, sweet, clean and free from other grain, and shall test not less than forty pounds per measured bushel.

No. 2 clipped white oats shall be $\frac{7}{8}$ white oats, dry, sweet, reasonably clean, practically free from other grains, and shall test not less than 38 pounds per measured bushel.

No. 3 clipped white oats shall be $\frac{7}{8}$ white oats, dry, sweet, reasonably clean, and practically free from other grains, and shall test not less than 36 pounds per measured bushel.

RYE.—No. 1 rye shall be sound, plump, well cleaned, and shall test not less than 56 pounds per measured bushel.

No. 2 rye shall be sound, reasonably clean, reasonably free from other grains, and shall test not less than 55 pounds per measured bushel.

No. 3 rye shall be all rye, slightly damaged, slightly musty, or for some other cause unfit for No. 2.

BARLEY.

No. 1 barley shall be plump, bright, clean and free from other grains, and shall test not less than 48 pounds per measured bushel.

No. 2 barley shall be sound, of healthy color, reasonably clean, reasonably free from other grains, not plump enough for No. 1, and shall test not less than 46 pounds per measured bushel.

No. 3 barley shall include all slightly shrunken and otherwise slightly damaged barley, not good enough for No. 2, and shall test not less than 44 pounds per measured bushel.

No. 4 barley shall include all barley fit for malting purposes not good enough for No. 3.

FEED BARLEY.—No. 1 feed barley must test not less than 40 pounds per measured bushel, must be sweet and reasonably sound.

No. 2 feed barley shall include all barley which is for any cause unfit for malting purposes and may include a liberal sprinkle of foreign grain and seeds.

CHEVALIER BARLEY.—The grades of Nos. 1, 2 and 3 Chevalier barley shall conform in all re-



MEMBERS AND CHIEF EMPLOYEES OF THE WISCONSIN GRAIN COMMISSION.

3, Homer Andrew, Superior, Wis., chairman; 1, John D. Shanahan, Buffalo, N. Y., member; 4, Milton F. Swanston, Michigan, N. D., member; 5, Byron Kimball, chief weighmaster; 2, S. P. Christenson, chief inspector; 6, J. B. Combs, deputy chief inspector.

allow Minnesota inspection when so requested by the shipper. However, the Wisconsin Commission made no concessions whatever to the interests that asked this concession, except that Minnesota may inspect on request, the fees therefor being covered, however, into the treasury of the Wisconsin Commission. The Commissioners have proceeded on the basis that Wisconsin inspection will be the only inspection at Superior, and after several days' consideration, on July 24 announced the following grades as in force and effect on and after August 1:

WHEAT.

DAKOTA.—No. 1 Hard Dakota spring wheat shall be sound, dry, bright and well cleaned spring wheat, composed mostly of the hard Scotch varieties, and shall test not less than 58 pounds per measured bushel.

No. 1 Northern Dakota spring wheat shall be sound, dry and well cleaned, composed mostly of the hard varieties of northern grown spring wheat, and test not less than 57 pounds per measured bushel.

No. 2 Northern Dakota spring wheat shall be sound and reasonably clean, composed mostly of the hard varieties of northern grown spring wheat and test not less than 55 pounds per measured bushel.

No. 3 spring wheat shall be composed mostly of the hard varieties of spring wheat, that are shrunken or for any cause not fit for a higher grade, and test not less than 53 pounds per measured bushel.

No. 4 spring wheat shall be composed of spring

sound, dry and reasonably clean, and test not less than 58 pounds per measured bushel.

No. 3 Pacific red wheat shall be Pacific red wheat not fit for a higher grade but fit for warehousing and test not less than 54 pounds per measured bushel.

Note A.—The grades of Pacific red and Pacific white wheat are to include such wheats as are grown in the Northwest and on the Pacific slope from either spring or winter seeding.

RED WINTER.—No. 1 red winter wheat shall be red winter wheat, the greater part of which shall consist of the dark colored varieties, sound, plump and well cleaned, and test not less than 60 pounds per measured bushel.

No. 2 red winter wheat shall be sound, dry and reasonably clean, and test not less than 58 pounds per measured bushel, and shall contain not over 10 per cent of white wheat.

No. 3 red winter wheat shall be sound red winter wheat of any varieties, not clean and plump enough for a higher grade and test not less than 56 pounds per measured bushel.

No. 4 red winter wheat shall include all merchantable red winter wheat not good enough for No. 3, slightly light in weight, not damaged by water or heating.

WHITE WINTER.—No. 1 white winter wheat shall be sound, plump, well cleaned white winter wheat and test not less than 58 pounds per measured bushel.

No. 2 white winter wheat shall include all sound, dry and reasonably white winter wheat, and shall test not less than 56 pounds per measured bushel.

No. 3 white winter wheat shall include dry, reasonably sound, reasonably clean, white winter wheat,

spects to the grades Nos. 1, 2 and 3 barley, except that it shall be of the Chevalier variety, grown in the extreme Northwest and on the Pacific Coast.

FLAXSEED.

No. 1 northwestern Dakota flaxseed shall be mature, sound, dry and sweet and shall be northern grown. The maximum quantity of field, stack, storage or other damaged seeds intermixed shall not exceed 12½ per cent. The minimum test weight shall be 31 pounds per measured bushel of commercially pure seed.

No. 1 Dakota flaxseed shall be northern grown, sound, dry and free from mustiness, and shall contain not more than 25 per cent of immature, field, stack, storage or other damaged flaxseed, and shall test not less than 50 pounds per measured bushel of commercially pure seed.

No. 2 Dakota flaxseed shall be northern grown, sound, dry and free from mustiness, and shall contain not more than 35 per cent of immature, field, stack, storage or other damaged flaxseed, and shall test not less than 49 pounds per measured bushel of commercially pure seed.

Rejected flaxseed shall include all flaxseed that has been bin burned, immature and field damaged, that is warehouseable and fit for storage, and shall test not less than 47 pounds per measured bushel of commercially pure seed.

Note C.—Yellow Oats—The grades of Nos. 1, 2 and 3 yellow oats shall correspond in all respects to the grades of Nos. 1, 2 and 3 white oats, except that they shall be of the yellow varieties.

Note D.—No-Grade Grain—All wheat, corn, oats, rye, barley, flaxseed or other grains that are found to be in a heating condition, wet, damp or musty, badly bin burnt, badly damaged, seemingly dirty or otherwise unfit for warehousing, shall be classed as "no grade" with inspector's notations as to quality and condition.

Note E.—Grain shall in no case be graded higher than that of the poorest quality found in the lot when it bears evidence of being loaded unevenly.

Note F.—Dockage on all grain shipped in the dirt shall be determined and reported by the inspector.

On the same day (July 24) S. P. Christenson was appointed chief inspector; J. B. Combs, first deputy, and Edward L. Cass, treasurer. S. P. Christenson is an experienced grain man and at the time of his appointment was connected with the work at the Grand Republic Mill and Elevator. J. B. Combs is a member of the Board of Trade of Superior.

The object for which the new department was created is to raise the standard of grain going out of Superior as well as to give the shippers of the Dakotas a "fair deal." For this reason the law requires a Dakota and a New York man to be members of the Commission. Buffalo receivers therefore recommended Chief Inspector Shanahan of the Chamber of Commerce of that city, who on his arrival at Superior said: "We want to get a system up here by which the Eastern men can have a dollar's worth of goods here worth a dollar when it gets down to Buffalo. That is what we have not been able to get with the inspection at the head of the lakes under the Minnesota officials, and the people down East have certainly wanted something that will give them a fair deal. The Wisconsin inspection should be a success and I hope to see it made one. There will be some work in connection with making it successful, but it should help in building up a market."

On the strength of Mr. Shanahan's presence on the Commission, New York millers, at least, expect to see the beginning of a long-awaited reform in the inspection of their grain. "For a long time," said one of them recently to a Buffalo reporter, "buying grain from Duluth and Superior has been like buying unhatched chickens; you might get what you contracted for or you might get something worth two or three cents a bushel less; the two or three cents representing much more than you expected to make on the purchase, to say nothing of the risk."

Mr. Shanahan will, of course, remain chief inspector at Buffalo.

Up to about July 20 the enormous number of 1,618,000 grain sacks had been ordered from the jute mills at the Washington penitentiary, and orders were still coming in for more. No surer criterion could be found for predicting a large grain crop this year in the "Inland Empire."

Secretary Wells has just issued a new list of regular grain dealers in Iowa, the pamphlet containing also the Constitution and By-Laws and Arbitration Rules of the Iowa Association. The list is accompanied by the proceedings of the annual meeting of May 17-18, in a separate pamphlet.

ELEVATOR ALLOWANCES.

A second inquiry into the influence on trade movements of the so-called "elevator allowances" was held at St. Louis on July 22-25, and substantially the same class of facts was elicited as at the first hearing of the same subject matter at Chicago, between one and two years ago. No attempt is here made to dwell upon the testimony of all the witnesses; but the gist of the whole matter was well covered by the testimony of James C. Lincoln, general freight agent of the Missouri Pacific, who was the principal witness on July 24. Mr. Lincoln began his testimony with the statement that the road he represented divided its elevator allowances into three heads. First, an allowance for elevation, transfer, storage, insurance and releasing of equipment; second, allowance on reshipment to secure such reshipment; third, allowance on transfer from car to car, which was given for the sole purpose of securing weight and inspection, it being necessary under the present method of doing business to have a Kansas City certificate of inspection and weight in almost all cases. This allowance was seldom given in any other place than Kansas City, as business conditions did not make it necessary. He included Kansas City, Omaha, Leavenworth, Atchison, Coffeyville, Little Rock and New Orleans as the points at which elevator allowances were made.

"The evil had its inception at Omaha," said Mr. Lincoln, "when the Union Pacific found itself with a terminus there and much grain destined for points eastward. It was necessary to have its cars released, and the road hit upon this device as the best method for hurrying the consignee. From Omaha it spread to every city where competitive conditions made it necessary, and it will continue to spread unless it is checked." Asked for the reason for not including St. Louis in the list of points receiving elevator allowances, Mr. Lincoln replied that conditions there did not demand it, and, so far as his road was concerned, it was through with the grain on its arrival at St. Louis and could release its own cars there by simply placing the grain in an elevator at the owner's charge. The fact that there is sufficient capacity for storing grain in St. Louis made conditions there and at Omaha at the time the allowance was established entirely dissimilar. There was not a sufficient elevator capacity at Omaha; consequently it was economy for the Union Pacific to grant the allowance for the sake of accelerating the handling of grain under adverse conditions.

At this point in the testimony Senator Cockrell suggested that if the roads would transfer their own grain, or have elevators in the hands of persons directly responsible to the railroads, there would cease to be trouble. To this Mr. Lincoln replied, "Certainly, if the allowances were arbitrarily discontinued, conditions would immediately arise to solve the difficulty; but no road could afford to abolish the allowances of its own volition." He added that the result of the allowances was discrimination against St. Louis; and to a final question by Chairman Knapp as to what he would do with the question had he the power, he replied: "I am of the opinion that the allowances would be abolished from A to Z."

S. B. Knight, general freight agent of the Wabash Railroad, was another witness. He stated that the points at which his road made elevator allowances were Chicago and Toledo, ¼ cent a bushel; Detroit, \$2 a car; and 1¼ cents the 100 pounds at Kansas City and Omaha on receipt. He admitted that a grain buyer from St. Louis could not possibly buy in Kansas and Nebraska in competition with a dealer from a Missouri River point where the allowance was made; and he also added that this was severe discrimination against St. Louis.

The Wabash, Mr. Knight said, does not make elevator allowances at St. Louis, because competition does not force it. He was in favor of abolishing the allowances, but could offer no method for

so doing, and said that he knew of no substitute for them.

A. W. Catlin of the Cochrane Grain Company of St. Louis said that under the system of allowances an allowance for elevator service of 1 cent a bushel on grain shipped at Omaha had been secured by their Western branch, when grain had gone to Centralia, Ill., thence by the Illinois Central to New Orleans, where a further allowance of 2 cents the 100 pounds had been secured, and that thus their Western house had actually sold grain in New Orleans for export 3 cents the 100 pounds cheaper than the St. Louis house could possibly do it.

On being asked if this condition did not obtain because the points mentioned were well supplied with elevators, he replied that St. Louis had more elevator capacity than grain, and that the mere fact of there being so many elevators in the country stamped them as a necessity, hence they must be profitable, and he inferred from that that the elevators do not need the allowance.

Marshall Hall, a member of the St. Louis Merchants' Exchange, who was formerly connected with the Burlington elevator at St. Louis, said that for a short time that elevator was given an allowance of ¾ cent the 100 pounds, but he was of the opinion that the abolition of the allowance system, while benefiting St. Louis, would not prove a cure. The reason for the falling off in the St. Louis grain trade, in great part, in Mr. Hall's opinion, is the differential between the rates to Gulf and Atlantic ports. Formerly, he pointed out, the shipper west of the Missouri River was afforded better rates to the Atlantic ports and consequently the grain came through the St. Louis gateway. Now, however, connecting lines having been built and the Southwestern service perfected, the short haul is to the Gulf and the grain sought a market in that direction.

Chairman Knapp asked if he meant to say that St. Louis was precluded from being an important factor in the grain trade because of her location. Mr. Hall replied: "Not at all. St. Louis can still be a factor in the grain trade, and an important one, if this elevator allowance can be removed; for the Southeast is open and, if we can go into Kansas and Nebraska and buy the grain, we can find a market for it. But, under present conditions, we cannot get grain by bidding against Kansas City and Omaha; and the fact that the grain is going to the Gulf is merely another factor in the St. Louis condition. Again, this grain which comes via Burlington and Centralia south would find a shorter mileage if it came by St. Louis; and the fact that it does not come by St. Louis under that condition can only be attributed to the elevator allowance it gets at Burlington and New Orleans. I know cases where grain got an allowance of 1¼ cents the hundredweight at Omaha, 1 cent at Burlington and 2 cents at New Orleans."

George F. Powell of the grain firm of Connor Brothers & Co. of St. Louis, said that the situation as it now presented itself gives cause for alarm more as to the future than for the present, as his firm is handling all Illinois grain at Cairo and they fear every day that an elevator allowance would go into effect there on grain shipped from Kansas City and points further west, in which case their business in that locality would be at an end. He thought that if left alone the system of allowances would spread itself throughout the country and end in a discrimination against St. Louis so strong as to prevent any business whatever.

Traffic Manager G. H. Crosby of the Burlington and Second Vice-President Harahan of the Illinois Central, who were on the stand during the hearing, all agreed that the roads received no benefit from the allowances and that they ought to be abolished. Alexander Nicoll, with J. Rosenbaum Grain Co.; Mr. Frazier, of Bartlett, Frazier & Carrington, and Samuel Scotten, of Harris-Scotten Co., Chicago, admitted that the allowances gave the elevator men a decided advantage over the outsiders.

Mr. Crosby said that his company is not in favor of the concessions, but has to make them because competing lines do. A contract between the Union Pacific and an Omaha elevator company started the thing going and other roads had to fall into line. In time of heavy business, in the beginning, the railroads thought to get quick release of cars by making the elevator allowances. They were also an inducement to big dealers to erect elevators, thus assuring large facilities and capacity for handling the business. He added that the points at which elevator allowances are not made are at a distinct disadvantage as compared with those enjoying them. Before the practice went into vogue, elevator owners performed the specific service of elevating grain, and received compensation therefor. Without the allowances, competition would be freer.

Asked by Senator Cockrell if the abolition of the allowances would increase the price received by farmers for their grain, Mr. Crosby said that a reduction of rates did not always increase the price of wheat in the country. The middleman, he said, gets the benefit of the rebate.

J. T. Harahan, of the Illinois Central Railroad, stated that his road makes elevator allowances at Chicago, East St. Louis, St. Louis, Memphis and Cairo. A charge is made for elevation of export grain at New Orleans. He believed elevator allowances under the conditions now existing were a mistake; that they should be wiped out and not granted at any point. The belief that the concession would aid in prompt release of cars, he said, was one of the motives for granting it in the first place.

George E. Marcy, of the Armour Grain Company of Chicago and president of the Southwestern Elevator Company of Kansas City, stated that the elevator allowances were detrimental to the grain trade, to the railroads and to the public at large. He believes that if continued they will lead to demoralization in the business. His company operates about 300 small elevators throughout the West, five large elevators in Chicago, one in Kansas City and two at Milwaukee. He said that at Kansas City certain shippers were receiving two allowances, amounting to $2\frac{1}{2}$ cents per 100 pounds. He did not hesitate to say that his elevator at Kansas City was an insignificant affair and was operated for the sole purpose of transferring grain in order to secure the allowance of $1\frac{1}{4}$ cents per 100 pounds. He said he had not benefited so far by the double allowance, but that he probably would on certain business which he now has under way.

Mr. Frazier, of Bartlett, Frazier & Carrington, was not in favor of abolishing the elevator allowances. The elevators are a necessity and must be maintained by someone.

Samuel C. Scotten said his house operates an elevator at Burlington, Iowa, one at Kansas City, three at Chicago, one at Gainesville, Texas, one at Winfield, Kan., and one at Galveston. The Kansas City and Galveston elevators are leased from the Santa Fe Railroad at a nominal rent of about \$5 a year. He named the allowances made by the railroads at these various elevators; but no allowance, he said, is made at the Chicago elevators. Mr. Scotten said that all shippers desire to be placed upon the same basis, and if such a basis can be secured with allowances in effect, he sees no cause for their abolishment. Otherwise they should be discontinued.

Omaha elevator men were not present at the hearing at St. Louis, but have through the Bee filed a protest—naturally, being the beneficiaries of the allowances. How much this benefit amounts to is indicated by the Bee's statement that, "During the last year \$700,000 has been put into elevators in Omaha because of the understanding with the railroads that the allowances would be made," quoting one of Omaha's leading grain and elevator men, who goes on to give Omaha's side of the question as follows:

"These elevators have been erected because the owners felt they would always be entitled to the

same transfer charges from the other roads as are paid by the Union Pacific. Formerly the Burlington, Illinois Central, Missouri Pacific and Rock Island had some point east or south where they paid the transfer charges instead of at Omaha. In this way considerable grain was pulled through and around Omaha without being transferred through the elevators at this point. On about June 17 the different roads which terminate at or pass through Missouri River points held a meeting at Chicago and all agreed they would pay transfer charges to elevators at Missouri River points only. The grain men maintained that if this was lived up to, it would not injure Chicago or St. Louis or any other Eastern or Southern market, but would simply have a tendency to make the roads pull the grain through Omaha and Kansas City instead of having the roads pull it around such points.

"This transfer is not paid on any grain except that raised west of the Missouri River; and we claim that if anyone is entitled to make a profit from transfer of grain it is the man who has an elevator at these Missouri River points. With the claim of Mr. Harahan of the Illinois Central that these charges should be wiped out and not granted at any point, the grain men do not agree. A great many of the railroads have elevators of their own for the transfer of grain, and until they all build elevators for the transfer at junction points they will either have to use other elevators and pay the allowance, or let their cars run all over the country.

"All roads which terminate at Omaha should take a stand in favor of these allowances, else the other roads soon will be shipping all of the grain by their short cuts and ignoring Omaha. This question has been adjusted by the Interstate Commerce Commission and the allowance made by the Union Pacific have been declared legal and reasonable. If the elevators were not used the roads either would have to let their cars run all over the country or resort to the old scoop, as the Union Pacific formerly did at Council Bluffs to transfer the grain from one car to another."

At Kansas City, on July 27, Commissioner Cockrell made an effort to learn that more than $1\frac{1}{4}$ cents per 100 pounds allowance was being paid to elevators in certain instances, but in this particular the investigation was a total failure. While all the grain men who went on the stand admitted receiving the allowance, all of them also asserted that they did not get more, and added that they knew of no one who did. Among the witnesses heard were F. P. Lint, E. O. Moffatt, T. J. Broadnax, G. A. Adams and E. P. Shields.

The last-named witness, who is a member of the Simonds-Shields Grain Company, was examined by Commissioner Cockrell in person. "When allowances by railroad are made, are not opportunities for discrimination and the granting of rebates opened up?" asked the Commissioner. "Certainly."

"As a general principle," asked Mr. Cockrell, "ought not the railroad companies to do the transferring of grain and all other things incidental to its transportation?" "The railroads are not in the grain business," objected the witness. "If the railroads were to take over this business, it would mean that an industry which has taken twenty-five years to establish would be broken up."

"The railroads should do everything connected with the handling of grain. There should be no persons between the shipper and the railroads," was the Commissioner's comment.

"I believe the present system of handling grain shipments to be much more wholesome than it formerly was," the witness said.

"How can you correct the present abuses of allowances in a better way than to make the railroads take over this business themselves?" asked the Commissioner.

"Well, I believe there are some abuses to-day regarding the matter of allowances which ought to be corrected," said the witness.

Mr. Lint of the Hinds & Lint Grain Company and Mr. Moffatt of the Moffatt Grain Company both approved the allowances. "If they were done away

with," asked Commissioner Cockrell of Mr. Moffatt, "wouldn't it do away with a whole lot of this double dealing and grasping and grafting? Whenever there is an allowance granted by a railroad there is a chance for manipulation. It isn't right." "I don't think it right," said Mr. Moffatt, "that the man who ships 100,000 bushels of wheat every few weeks should be on the same footing with the man who ships 1,000 bushels a year."

"O, no government can tolerate a thing like that," retorted Commissioner Cockrell. "If that policy is to be carried out we might just as well turn everything over to the rich right away. The poor man will stand no chance."

"Do you think the time will ever come when there won't be rebates?" asked Mr. Moffatt.

"The time is coming. It is on the way," replied Commissioner Cockrell.

Meantime Commissioners Knapp and Clements were at work on the same inquiry at Washington; and on July 28 investigated the charge that in many instances rebates have been allowed. Witnesses were heard in the case of the Spencer Kellogg Grain Elevator Company of Buffalo, an independent concern.

An effort was made to prove that the company had allowed a rebate of one-eighth of a cent a bushel on a particular shipment of oats from Chicago to New York by way of Buffalo. The principal witness was James A. Patten of Chicago, who admitted receiving the rebate, amounting to about \$230, but who declared that he did not know he was doing anything illegal. Mr. Patten testified that he had shipped 150,000 bushels of oats to New York from Chicago via Buffalo and that he had made his own routing to Buffalo. Beyond that point it was stated Knight & McDougali, brokers in New York and Chicago, had had charge of the routing. Mr. Patten stated that he had received \$230 from his shipment east of Buffalo and was of the opinion that it came from the elevators, although he had no first-hand knowledge.

William White of Buffalo, who prosecuted the case, stated to the Commissioners, as the press reports say, that the elevator service was charged in the regularly published tariff of the railroads running out of Buffalo at one-half cent a bushel. Evidence was adduced to show that the Lehigh Valley Railroad had made repayments to the elevator company and Mr. White stated that the regular published tariff east of Buffalo had been plainly violated in the case.

Further testimony was taken to the effect that the rebate was given by a grain brokerage firm operating in the interest of the elevator company. The testimony indicated also that the elevator company employed soliciting agents to obtain business for it, and that these agents were paid a commission for their work. From these commissions the rebate was allowed the shipper.

On behalf of the company the contention was made that it was not a common carrier in the sense that the law contemplated, as applied to railroads; that it was in the elevator business absolutely independent of the railroads, and that the elevation of the grain was no part of its transportation. Hence it was held by counsel for the elevator company that there was no illegality in the methods adopted by it in obtaining and transacting business.

It also appeared at the inquiry into the effect of the "shrinkage system" of through billing to the Southeast at Louisville that Louisville grain dealers are paid three-quarters of a cent per hundred pounds by the railroads when grain is put in an elevator there for rehandling to the Southeast in order to help pay the elevator expense. This allowance is made by the L. & N., the Southern Railway, the I. C. and the C. & O., but the allowance applies only to grain that is shipped out of Louisville, and has no connection with grain that is kept there.

On August 4 the Chicago Great Western brought matters to a climax and caused a stir in freight circles by filing with the Interstate Commerce Commission a tariff stating that the rate of 12 cents per 100 pounds on grain from Kansas City to Chi-

cago will include an allowance of 1¼ cents for loading at Kansas City, and 1¼ cents for unloading at Chicago.

President Stickney of the Great Western had told the Commerce Commission that the practice of granting elevator "allowances" was nothing more or less than paying rebates secretly. For this reason his road has openly published in its tariff the allowances from the rate which it will make in order to meet the action of its competitors. The latter contend that the Great Western, by naming both loading and unloading charges of 1¼ cents each, is really cutting the grain rate by 1¼ cents per 100 pounds from Kansas City to Chicago. The Great Western replies that it is only doing openly what its competitors are doing secretly.

IT PAYS TO BUILD WELL.

That it pays to build well, when it is a matter of constructing grain elevators, was again exemplified recently when Skillin & Richards Manufacturing Company took an order for a new main shaft for the South Chicago Elevator "D," operated by J. C. Shaffer & Co., Chicago. The shaft was put in about 10 years ago on a timber foundation. The timbers had rotted and shrunken so that the shaft had lost its adjustment and the hub of the sheave had become worn on the shaft so that it became necessary to have a new one. Mr. Stream, manager of the company, said that the shutdown while the shaft was put in cost the firm \$2,000 a day. The new shaft, however, goes in on a concrete foundation and will be in service as long as the elevator stands. The firm is also renewing the friction clutches on the cupola to drive the elevator legs.

CLUMSY ATTEMPT TO SWINDLE.

An attempt to utter forged bills of lading so clumsy that the detectives caught the drift of the scheme before anyone had lost money by it came to light about a month ago in Wichita, Kan., where the guilty party was put under arrest.

The would-be swindler was one W. H. Burke, who addressed a number of letters to commission men and millers in Kansas City, St. Joseph and Topeka, over the signature of Pace & Co., in which communications it was stated that Pace & Co. had purchased a line of elevators in Kansas and Oklahoma and were ready for business and solicited a business connection. The clumsy methods of the party are shown by their attempt to swindle the Benton Grain Co. of Kansas City, who, under date of July 21, wrote this office as follows:

Early in June we received a letter signed "Pace & Co.," advising us that they had purchased a line of country stations and asking us if we had adequate facilities to handle their entire line of business to this market. We wrote them advising that we would be glad to handle their account. They referred us to all the banks in Wichita as references. Requests for references being made to these banks, the reply was received that these parties were unknown.

About July 7 we received another letter from them, stating that they had made draft on us with bill lading attached for two cars. When this draft arrived a little later in the day, it was for \$1,250, which was a very reasonable amount, considering the state of the market on that date. But inasmuch as we were not acquainted with these people, we immediately began to investigate to see if we could find some one who was acquainted with them, before paying their drafts. We also went to an equipment guide to look up the cars to see how large they were. Upon investigation we found one car to be a flat car and the other a stock car. We immediately wired our Wichita connections to investigate and see if they could find the gentleman who purported to be Pace & Co. Without very much trouble he was located in the person of W. F. Burke, who is now in custody at Wichita, Kan., where he is held on several counts.

The experience of T. P. Gordon at St. Joseph, Mo., was almost identical, save that before he had found it necessary to investigate he received no time from the chief of police and the Santa Fe

office that the bills of lading attached to the draft were forged. Other firms had similar experiences, but no one, fortunately, lost any money. The Santa Fe police profess to have learned that several men have been at work in the Southwest on this lead, but without success so far as is known.

J. A. MANDER.

The grain trade has always attracted bright men, or, at least, it is the bright men who get into the grain trade; and without doubt the business demands more than any other men of broad caliber, of sound judgment and broad vision, and last, but not least, those who observe strictly the rules pertaining to sound commercial conduct.

One of the young men who has progressed very rapidly in the grain trade for one of his years is shown in the accompanying illustration. J. A. Mander, who is now manager of the country elevator department of the Milwaukee Elevator Co. of Milwaukee, Wis., was born in Ottawa, Ont.,



J. A. MANDER, MILWAUKEE.

June 22, 1871. He attended the public schools of that city until twelve years of age, when he came with his parents to Chicago and finished his education in this city. He made his entrance in the grain business in 1901, when but nineteen years of age, by taking a position with Armour & Co. After a connection with the Chicago house until 1898, he went with the Milwaukee Elevator Co. of Milwaukee and for three years traveled for them through Wisconsin and the Northwest. He then took the position which he holds at the present time.

Mr. Mander has very many friends in the northern territory, which he has gained by the manly, genial qualities which attract one man to another. He is a loyal supporter of state association work and has taken great interest in it since the work started.

There are great claims made for Milwaukee's future as a grain market and when it reaches the high place in the grain trade that its friends wish to see it occupy, it will be from the influence exerted by Mr. Mander and men of like character.

The grain inspection department of the Toledo Produce Exchange has issued the grading rules now in force and effect in that market in pamphlet form, which can be had on application to Ed. H. Culver, chief inspector, or A. Gassaway, secretary.

The absorption of new wheat since the new crop commenced to move has been the largest on record. Kansas City and St. Louis received 11,000,000 bushels during July, and their joint increase in stocks during that period is less than 1,000,000 bushels.

NATIONAL HAY ASSOCIATION.

Hay dealers, shippers and receivers, comprising close to 70 per cent of the entire membership of the National Hay Association, were represented at the twelfth annual convention of that organization at Toledo, Ohio, July 18, 19 and 20. A good program had been provided and Toledo "did herself proud" in looking after the welfare of the delegates and providing entertainment for them between business sessions. In spite of the hot, sultry days and nights the delegates had both a profitable and an enjoyable time. Headquarters were at the Boody House and the business sessions were at the Valentine Theater. In the rear of the stage was the hay grading exhibit, interest in which the secretary and other officers have been working up ever since the successful experiment in this line at the St. Louis convention a year ago. Bales representing the ideas on grades of a large number of shippers and receivers were exhibited. A number of bales containing known percentages of clover and timothy hays was the focus of a considerable amount of the interest shown in the exhibition.

Put-in-Bay Island, Ohio, was selected as the meeting place for next year. It was, however, determined that in case satisfactory arrangements as to the date, rates, etc., could not be made, the convention should be held at Winona Lake, Ind.

Officers elected for the ensuing year were:

President—F. D. Voris, Neoga, Ill.

Vice-President—H. H. Driggs, Toledo, Ohio.

Second Vice-President—Harlie Yost, Libertyville, Iowa.

Secretary-Treasurer—P. E. Goodrich, Winchester, Ind.

Board of Directors—(Term expiring in 1907), H. G. Morgan, Pittsburg, Pa.; H. W. Robinson, Greenspring, Ohio; D. L. Leas, Waterloo, Ind.; H. W. Benedict, New Orleans, La.; R. B. Clark, Chippewa Falls, Wis.; (term expiring 1906, vacancy caused by election of Mr. Voris to the presidency), Chas. England, Baltimore.

After the invocation by the Rev. Ernest B. Allen, Mayor R. H. Finch gave the members the keys of the city in a short address in which he told of the manifold advantages of Toledo, geographical and otherwise. E. L. Southworth, president of the Toledo Produce Exchange, followed Mayor Finch and added a special welcome from the members of the Exchange.

The response to these addresses was delivered by Frank F. Collins, the veteran member from Cincinnati, who among other things said:

Our Association is national in its character; it is organized for the purpose of advancing the interests for which it is assembled. Our members do not believe that it is possible, probable or profitable, endeavoring to perform the impossible. They do not believe in lawless disorder, but they do believe in the preservation of the majesty of the law. They do not believe in getting and forgetting; but they do believe in giving and forgiving. They do not believe in controversies and disagreements; but they do believe in a liberty of expression that makes a row possible. They do not believe in condoning wrongful, irregular, dishonest practices, nor in ostentation that begets false living; but they do believe in unbending, unyielding, unswerving, eternal right everywhere and always, and old-fashioned, rugged honesty, to be paramount and supreme.

One of the most interesting talks of the convention was on "How to dispose of low grades," by E. N. Wasmuth, Roanoke, Ind. A general discussion followed the reading of this paper and culminated in the adoption of a motion providing for the appointment of a committee by the new administration to take up the improvement and betterment of grasses. Mr. Wasmuth's paper was in part as follows:

If I could solve the problem of handling low-grade hay for you, I would consider that I had eliminated the most unsatisfactory part of the hay business. I do not believe that I can tell you how to profit by handling low grades of hay, but I do believe that by concerted action much of the loss and annoyance from this source can be avoided.

It is regrettable that hay cannot be treated by buyers and handlers to raise its grade or put it in condition for market, as is done with grain and other farm products. Very little can be done to change the condition of hay after it goes into the mow or stack and nothing at all after it is pressed.

The manner of handling it differs in different locali-

ties. Most dealers buy the hay loose and press it themselves, while in other instances the press operators have no interest in the buying, but do the pressing at a price per ton and the buyer sees the hay later. The first method offers the best opportunity for sorting and keeping out the bad hay, but even it is not very effectual.

There is always some demand for low grades, and in years of light crops they do fairly well and even make some money under favorable conditions. But when the supply of hay equals the demand, they seldom pay out, no matter what price is paid for them, and when the markets are over supplied, as they have been continually during the past year, they are almost unsalable. The accumulation of these low grades in receiving markets bears the market in general and results in lower prices for the better grades as well, thus menacing the profits on all. There is no way in which the question is faced that does not show a loss to the shipper.

Competition in the hay trade, like that in all others, is keen, and with the hope of holding the customer and perhaps remembering that a car he has just sold did better than he anticipated, the country dealer buys and trusts to luck, hoping only that he will get out without loss. He then tries to sell it locally, but failing in this, it generally goes to some commission man, who, if he is a conscientious one, is compelled to use several times the effort to sell the car that would be needed in disposing of a better grade, and, indeed, is often compelled to sell it several times before it is unloaded. While the shipper may handle the hay under a sort of protest, there is no doubt that the commission man generally does have it thrust upon him. Little effort is ever made to secure such consignments, and less frequently is the shipper offered an opportunity to sell any grade below No. 2 on his track.

It appears that these conditions are growing more aggravating each year. The demand for all but choice and No. 1 and No. 2 hay becomes apparently less each year, and there are reasons for this. A few years ago large quantities of hay of all grades were sold for consumption by street car horses, and not so long ago in Eastern cities were dairies in which the milk cows were stall-fed throughout the year and on

the farmer to acknowledge the worthlessness of his poor hay, the dealer handles it at a price that will "let him out" and buys a neighbor's good product at a profit. Such a policy puts a premium on careless farming instead of discouraging it, as should be done. Dealers should co-operate with each other to keep the price of low grades down. It is not done where co-operation is not had, and the result is that farmers get relatively better prices for poor hay than for good and make less effort to raise the good hay and cure and market it properly. This condition should not exist, as it is resulting in more poor hay being offered each year and more trouble and less profit to the dealer.

A few years ago grain dealers in certain parts of Indiana paid the same price per bushel for sound mixed corn as for yellow or white corn, although



SECRETARY P. E. GOODRICH OF WINCHESTER, IND., AND PRESIDENT F. D. VORIS OF NEOGA, ILL.

they were compelled to sell it generally for one or two cents less. Finally, a few years ago, by mutual agreement, they made a difference of two cents per bushel against the mixed corn, with the result that within two or three seasons no mixed corn was offered for sale and very little raised. Such careful grading of hay results equally as well. If buyers would insist upon buying trashy hay at its actual value the offerings would rapidly diminish.

Then a buyer should be careful to grade his hay properly when shipping where it is at all possible and under no circumstances attempt to cover low grades in cars of No. 1 or No. 2. He should be honest and careful in describing it when either selling or consigning it.

It is much better, as a rule, to dispose of low grades in the winter months, as there is more demand at that time. This, too, is very hard for a dealer to influence, as many of his customers who have taken his advice to attempt to feed it will find just before the new crop is ready to harvest that they will not be able to feed at all, and as they want to empty their mows they must sell it, and he is compelled to ship it at a time which is generally the worst of all the year in which to find a market. Last, dealers should seek the nearest market they can find or one that will take the hay and necessitate the smallest outlay for transportation.

I believe that the co-operation of dealers to induce farmers to feed their poor hay, thus limiting the supply, and to keep the price on it where it will insure a profit to the shipper, and this you know means a very low price, will help us to solve the problem of disposing of our low grades at a profit, but I think that in the final analysis we find, first, that there is too much low-grade hay made and even too much No. 2, that with careful farming we should have more choice and No. 1 for market. Second, that some very effective work might be done in most hay-growing sections of the country to teach the hay growers the needs of the market and to assist them in meeting them, and last, that the National Hay Association might, with very good grace and with much profit to its membership, undertake a campaign for this purpose.

We have co-operated together as shippers and receivers to establish grading rules, and this has been a very great benefit to all in the determining of values and facilitating the making and filling of contracts. We have seen these rules changed and grades lowered by the efforts of shippers and the co-operation of receivers, but no changing of the rules that determine what shall constitute a bale of No. 1 timothy will add to the value of the product to the farmer, for with the widening or narrowing of the differences between a choice and No. 1 or between No. 1 and No. 2 will come a corresponding widening or narrowing of prices obtainable.

Then why not go to the producer with an effort to educate him as to the wants of his market, the proper manner in which to prepare his soil and to seed his ground and make and cure his hay? Such an effort can be and is made by hay buyers individually. I believe this to be a very practical work for the National Hay Association. There are large sections of the country in which the production of hay for market is now a leading industry, where a half-score years ago none was raised that found its way to a market more distant than the neighboring communities.

The other side of the question might be considered and the customers given some attention. A large per cent of consumers will be satisfied with nothing but pure timothy hay. Now, of all grasses and almost of all crops, timothy is the one that impoverishes the soil most and therefore it cannot be raised continuously. On the other hand, clover fertilizes and builds up the soil and its cultivation on this account becomes necessary. It is claimed by farmers generally and conceded by many intelligent feeders that there is more nutriment in clover hay than in a like

amount of timothy, and yet on every hand receivers tell us that their customers will not use it and ask us to raise and ship the product for which there is a demand. There is no doubt that timothy can be fed with a mixture of a certain per cent of clover to good advantage under most all circumstances, and here is an opportunity to educate the consumer that should be taken advantage of, and receivers generally should lend their efforts to assist it.

In the report of the committee on statistics the chairman, Franklin L. Lewi, showed the results of prevailing conditions rather than the causes leading up to them.

The committee on grades, of which D. L. Leas, Waterloo, Ind., is chairman, recommended the adoption of the following grades for alfalfa:

Choice alfalfa shall be reasonably fine, leafy alfalfa, of bright green color, properly cured, sound, sweet and well baled.

No. 1 alfalfa shall be coarse alfalfa of bright green color, or reasonably fine alfalfa of good color, and may contain 5 per cent of foreign grasses, must be sound, sweet and well baled.

No. 2 alfalfa shall include alfalfa somewhat bleached, but of fair color, reasonably leafy, not more than one-eighth of foreign grasses, sound and well baled.

No. 3 alfalfa shall include bleached alfalfa, or alfalfa mixed with not to exceed one-fourth of foreign grasses, but when mixed must be of fair color, sound and well baled.

No-grade alfalfa shall include all alfalfa not good enough for other grades, caked, greasy, musty or thrashed.

The members present on the committee on grades, after having a conference with the committee from the New York Produce Exchange, suggest or recommend that a general committee come together at the next annual meeting for a conference to see if the grading now in force can be bettered or not, this committee to consist of a representative of each of the leading markets and five shippers selected by the president of the Association. Said committee to re-



H. H. DRIGGS, TOLEDO,
First Vice-President National Hay Association.

very low grades of hay, but both of these and many other sources of consumption have disappeared. On the other hand, the supply has not diminished and indeed it appears that more low grade is offered continually.

Now, as to how to dispose of these low grades. It would be an impossibility for anyone to advise this assemblage of hay dealers, representing every hay-growing state in the Union, through what channel low-grade hay should be disposed of, in the sense of naming markets or lines of customers. The conditions in different localities differ. For instance, in the seacoast markets there is a certain demand for these grades for cattle feeding on ocean steamers, but the price realized seldom justifies shipments from points in the central states. In other markets, other and various uses are found for them, but in most instances the nearest market is the best, as the freight is not so large a consideration in the delivered cost. The best solution of the question, without doubt, is that the low grades should be fed upon the farm. Shippers should use every effort to get farmers to, first, make good hay; second, when they have a low grade, mow it or stack it separately, where they can get at it to feed, and while doing this, to sort it, carefully distinguishing not only between meadows of different grades, but in the product of each individual meadow, keeping aside all weedy, discolored or damaged hay, where they can get at it to feed, and separate from that which they wish to market.

Then, if the dealer must buy low-grade hay he should buy it low and not figure to handle it for nothing, while he looks for profit to the better grades. In most cases, because of the reluctance of



HARLIE YOST, LIBERTYVILLE, IA.,
Second Vice-President National Hay Association.

port to the committee on grades, they to report to the general convention.

At the afternoon session, Wednesday, A. E. Reynolds, Crawfordsville, Ind., gave an interesting address on "Plain Facts." He said, among other things:

As business men we should at once relegate fancies to the poets and fallacies to the demagogues and deal squarely with business facts. The first fact that presents itself to me in a business career is to establish a business on honest business principles. We should deal with fair weights, fair grading and fair treatment of everybody in every line. We should put away all idea of sharp practices and deal with those principles which alone can be recommended. Failures in business are caused by a lack of knowledge of the business in hand. If you are in the hay and grain business you must know the grade, what to pay for it and what to sell it for. You may say that it is a homely, common business. Maybe it is. A peasant vender that knows his business will succeed; the same is true of the hay and grain man. For the past few years we have seen a great wave of agitation in favor of the so-called "farmer elevator business." It clipped into your business also. Ninety-six of these elevators have been built in the state of Illinois, but forty-six of them have gone into the hands of receivers, and how many of them are on the verge of it only their managers know; and this within the last twenty-four months. Why? The business is there, the capital is there, and the business is all right. They simply did not understand the trade. They were going to

show us how to handle hay on 25 cents a ton, and also show us how we could pay the farmer No. 1 prices for No. 2 hay. That is why they failed. These are all plain facts. The facts that control every human motive are the facts he must know before he can succeed in the matter in hand.

Short addresses were given for the various sections of the country by A. E. Reynolds, Crawfordsville, Ind.; E. A. Dillenbeck, New York; D. P. Byrne, St. Louis, Mo.; W. S. Leavitt, Boston, Mass.; J. N. Sternberg, St. Paul, Minn.; A. E. Clutter, Los Angeles, Cal. The addresses were interesting and were in the nature of a resume of conditions in previous years as compared with the present.

At the closing session the place of meeting for 1906 was selected after a discussion in which everyone was given an opportunity to participate. Put-in-Bay Island, with headquarters at the Victory Hotel, was decided upon, with second choice as Winona Lake, Ind.

Routine business occupied the remainder of the session. The election of officers for the ensuing year was held, with the result as noted above. After the new officers were duly installed the convention adjourned.

AMONG THE BALES OF HAY.

Churchill & Co. of Toledo distributed match safes.

J. Abel was there from Cleveland distributing blotters everywhere.

C. A. Foster, Pittsburg, Pa., gave out pocket mirrors in celluloid cases.

The "card" used by John A. Kilpatrick & Co., Philadelphia, was a celluloid pen holder.

The United Grain Co., Chicago, Toledo, Buffalo, distributed good, solid envelope openers.

The Gale Bros. Co., Cincinnati, distributed blotters showing they had "something to crow about."

The Pittsburg delegation returned home via Cleveland, taking the boat from Toledo to that city.

The gold and enameled stickpins given members as they paid their dues and registered were highly prized.

My! but it was hot! But—such is perversity—the day after the convention adjourned was nice and cool.

Lead pencils with good erasers were given out by the Grain Dealers' National Mutual Fire Insurance Co.

C. G. Egly, Berne, Ind., says 20 per cent of the hay crop was made too late, but there is an "endless" quantity.

Harry Elgert presented shippers with a black leatherette wallet bearing the card of J. A. Manger & Co., Baltimore.

Delegates who went to the "Farm" learned there is "nothing better for nerve than a good strong Beveridge (S. T.)."

All delegates who called at the office of J. F. Zahm & Co. in the Produce Exchange Building were presented with carnations.

There was no trouble in getting acquainted this time, as each delegate was "tagged" with a card showing his name and address.

Several models of hay presses were on exhibition in the lobby of the Boody House and one was shown in connection with the hay exhibit.

Everyone commented upon the royal welcome and the cordial hospitality extended to the visiting hay delegates by the citizens of Toledo.

"Next year," says Raymond P. Lipe, Toledo, in speaking of the hay exhibit, "we'll have some English hay and some French straw for the exhibit."

John B. Daish, Washington, D. C., was present, of course, but an attack of the "rheumatics" centering in his right foot kept him from being as frisky as usual.

Wm. E. Peters of New York City spent a large part of July and part of August traveling through the West, including the hay convention at Toledo in his itinerary.

"It's remarkable, considering the large number attending this convention, that there is no disorder"—a comment overheard in the dining room of one of Toledo's hotels during the convention.

And the ones who made the comment weren't hay men either.

A 60-inch tape measure in a celluloid case was presented to delegates by John H. Irvin, manager of the hay and straw department of S. C. Woolman & Co., Philadelphia.

A number of Toledo grain men were surprised to meet some of their grain shippers at the con-



RALPH L. GALT, WASHINGTON, D. C.,

vention. Inquiry disclosed the fact that they "also handled hay."

The Home Telephone Co. of Toledo and the Illinois Telephone Co. gave delegates to the convention the free use of their lines from 6 p. m. each day until 9 a. m. the following day.

A happy thought was the distribution of dodgers on the Greyhound Wednesday night advertising the importance of Thursday morning's session. It resulted in a large attendance at the final session.

A fan with a numbered slide and a disc with a number of sentences for telling fortunes furnished



CULVER ON A HOT DAY.

considerable amusement. It was presented with the compliments of W. A. Rundell & Co., Toledo.

A fan which when not in use could be folded in a stick resembling a cigar was given out by the Clyde Grain and Produce Co., Clyde, N. Y., who were represented by George E. Brisben, manager.

On paying his dues at the secretary's desk each member was given a gold-plated stickpin with the emblem of the Association enameled in colors and two envelopes containing street car tickets and tickets of admission to the Farm Theater and the steamer Greyhound. He was also given an

identification card, which was pinned to the coat. An additional ticket admitting to the matinee performance at the Casino Theater was given to each lady in attendance.

Members of the New York Hay Exchange Association wore white badges bearing their emblem and the words, "Delegate National Hay Association Convention, Toledo, Ohio, 1905," in gold lettering.

St. Louis Hay and Grain Co., St. Louis, Mo., represented by Z. P. Forman, secretary-treasurer, presented delegates with a crystalloid card, 5x5½ inches, the lower half of which contained a perpetual calendar.

In the St. Louis delegation was W. H. Karns, representing G. L. Graham & Co. Mr. Karns has been a hay salesman in St. Louis for twenty-six years and was the only member of the St. Louis "Old Guard" at the convention.

[For the "American Elevator and Grain Trade."]

RELATIONS OF COMMISSION MAN AND SHIPPER.

BY EGIL STEEN.*

It is with a great deal of interest that I have listened to the reading of Mr. Leighton's paper. Seemingly, the strongest point made by Mr. Leighton against shipping hay on commission is the apparent legal inability of the shipper to hold an unscrupulous commission man liable for consigned goods at anything above the price that the latter sells for, no matter at how low a price, or how much below the market, whereas, in selling direct a contract is entered into whereby the receiver is bound to pay a certain definite price for stuff shipped.

In reply, I would say that it is possible for the shipper to protect himself against the condition of which Mr. Leighton complains, that is, if it is at all possible to protect yourself from an unscrupulous man, if you are going to do business with him, no matter if you consign to him, sell directly to him or deal with him in any other way.

If you instructed your commission man to sell a shipment at \$15 per ton and he sold at \$10, no sane judge or jury would hesitate as many minutes in awarding you \$5 per ton damages. Of course, it is entirely impracticable to set a limit on hay in consigning, as it is not possible to tell just what the market will be when the stuff arrives, but the same principle can be applied. When you consign, you can and should instruct your commission man to sell your shipments at market price on arrival, and if he accepts your consignments on those terms, he enters into a contract with you to sell your goods at market price in return for commission paid. If he then sells at \$1, \$2 or \$3 per ton less than the legitimate market price for the grade of hay on date of sale, you certainly have a just and legally collectable claim against him for the difference between the price sold at and the market price. Your claim would be just as legal against him as if you had consigned him a lot of stuff and told him to hold until a certain period and he then went ahead, and in the face of your instructions, sold at a different period and at another price than the stuff would have brought if instructions had been followed.

As to whether selling outright is more profitable than consigning, depends entirely on the crop conditions of each season, the market you deal in and the man with whom you deal. If selling outright has proven profitable, you have the commission man to thank for it. Who is it but the commission man (in conjunction with the shipper) that has established and maintained the present rules of grading? Who is it that has consistently in the past and is to-day hammering at the grading rules with a view to having them made more stringent? Why, it is the receiver who buys only. Did you ever know of a buyer honestly advocating

*At the request of the editor, Mr. Steen has kindly reduced to writing the kernel of his remarks at the Jackson meeting of the Michigan Hay Association, in reply to Mr. Leighton's paper, referred to in the report elsewhere of that convention.

more liberal grading—the placing of a lower quality hay in a higher grade? Absolutely not. The buyer's sole aim and purpose is to raise standards and lower prices at which to buy, and if the question of grades were left entirely to the buyers, you would not only have a grade of No. 1 timothy established that would not admit of any clover whatsoever, but you would have a grade of No. 1 timothy that you would have to hunt for with a microscope in Michigan this coming season. Did you ever hear a man who wanted to buy from you preface his bid with the information that the market was bare of receipts, the demand good and market likely to advance a couple of dollars? It is the straight commission man who keeps the shipper thoroughly posted on the market and what stuff is selling at, that compels the buyer to pay the prices that he does.

If you eliminate the commission man (and by a commission man I do not mean a man who is in the "rake off" business, but a shipper's agent, if you please—a man that is commissioned to perform and does a certain service), you do away with the shipper's best and only friend at terminal points. He is, if at all conscientious, your personal representative, the only one at the terminal point who is interested in looking out for your end of the deal. All the reforms that have been brought about through our boards of trade and chambers of commerce have been brought about, not by the "exclusive buyers," positively not, but by the commission men. When you are shipping a car of hay, you are not shipping a car of stoves or chairs, manufactured according to pattern and catalogued to sell at a set price. The crop of hay varies with each season, and it is absolutely necessary that your interests be represented by salesmen, who will see to it that fair rules and grades are established and maintained, so that you can market each season's crop to advantage. There is not a buyer on the top of the earth that can do an honest business and afford to pay you anything more than the market price less a commission, or profit; and if the commission man always obtains you that, i. e., full market price, in which other way can you dispose of your hay to better advantage?

INDEMNITY COMPANY MEETING.

The Tri-State Grain Dealers' Indemnity Company met in annual session in Mitchell, S. D., on August 3. About forty members and stockholders of the company were present. The territory covered by the association includes southern Minnesota, northwestern Iowa and southeastern South Dakota. Over \$800,000 insurance is carried in this association by 250 elevators throughout the Northwest.

The officers elected for the ensuing year were: President, A. E. Brown of Luverne, Minn.; secretary, E. E. Butler of Herron Lake, Minn.

GRAIN BUYERS' ASSOCIATION.

The American Grain Buyers' Association held the first biennial convention at Minneapolis on July 13, when the following officers were elected to serve for two years:

President, E. F. Barrett, Atwater, Minn.
Vice-president, William Steele, Delhi, Minn.
Secretary, E. H. Fuller, Wheaton, Minn.
Treasurer, A. Lundquist, Wilmar, Minn.
Manager, Charles L. Ward, Litchfield, Minn.
Members of advisory board, C. C. Gleason, Kasson, Minn.; E. W. Eaton, Bowbells, N. D.

The Minnesota division elected the following officers:

President, P. J. Schwarg, Dodge Center, Minn.
Vice-president, O. F. Johnson, Reading, Minn.
Secretary, Milo Billings, Windom, Minn.
Treasurer, J. R. McPhee, Comfrey, Minn.
Members of advisory board—John H. Lee, Fairfax, Minn.; Bert E. Beard, Montevideo, Minn.; George Duerenberger, Granite Falls, Minn.; Thomas A. Vesta, Louisburg, Minn.; George Henslow,

Windom, Minn.; C. E. Lockerby, Northfield, Minn.; A. C. Paulson, Brandon, Minn.; N. Nelson, Fertile, Minn.; A. J. Krueger, Paynesville, Minn.; W. H. Annis, Campbell, Minn.; Wm. Byron, De Graff, Minn.; Seth Miller, Odessa, Minn.; Robert Miller, Porter, Minn.; N. O. Stromer, Halsted, Minn.; L. P. Larson, Evansville, Minn.

RECONSIGNMENT AT ST. LOUIS.

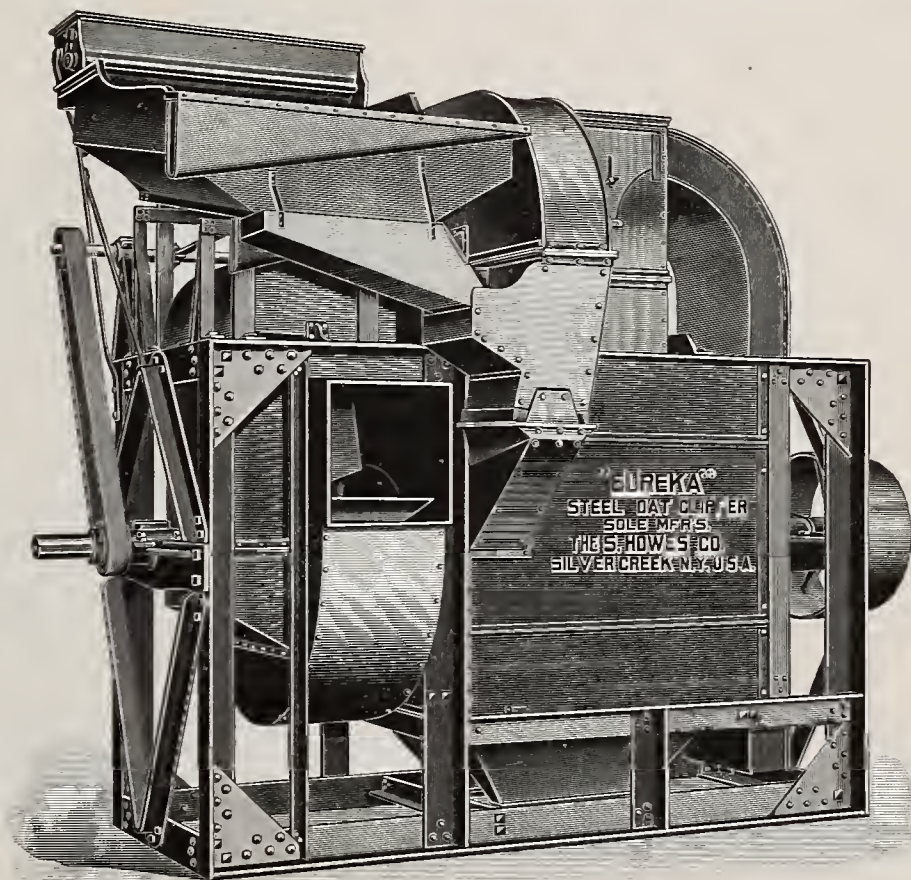
The reconsignment charge of \$2 per car at St. Louis is still a live question, in spite of the announcement, made some weeks ago, that the charge had been abolished by the Missouri Railroad Commissioners. Such an order was, indeed, issued by the Commission, but unfortunately without due notice to and a hearing of objections from the railway companies. The roads thereupon refused to obey the order. The Commission then decided to reopen the matter, and directed that a hearing be had at St. Louis on August 4. Accordingly, the transportation committee of the Merchants' Ex-

THE "EUREKA" STEEL OAT CLIPPER.

As soon as a special requirement is created in the grain cleaning line, the old established house of the S. Howes Co., Silver Creek, N. Y., is prompt in producing a machine of improved design and special merit to meet the situation. As fireproof elevator construction has come into vogue, necessitating an equipment of fireproof machinery, it has produced the Eureka Steel Oat Clipper, which we illustrate herewith, and which, it is stated, is being supplied for use in some of the largest modern elevators.

This steel clipper is built for large capacity, and, it is claimed, embodies all the latest and most desirable features. It is constructed with a view to extreme strength and durability, as well as being capable of producing highly satisfactory results.

Being equipped with a large shaking-shoe, containing two screens for separating the coarser and finer impurities, it forms a very complete cleaner



THE EUREKA STEEL OAT CLIPPER.

change and representatives of the railroads met the Commission at its St. Louis office and offered evidence against and for the change. The railroads contended that when grain is reconsigned to places off their own tracks, this constitutes new service, for which the charge of \$2 is justified, and referred to the ruling of Judge Burgess of the Supreme Court in a mandamus proceeding in 1903 involving the same point, when the position of the railroads was sustained by the court.

After a hearing of both sides, counsel were allowed fifteen days to file briefs in support of their arguments, and the Commission will then take the matter under advisement.

Arguments were heard on July 19 at St. Louis by the Illinois Railroad and Warehouse Commission in the case of the St. Louis Hay and Grain Company against railroads entering East St. Louis, Commissioners J. S. Nevel and A. L. French being present.

The complainants contended that the railroads are discriminating against hay by exacting a reconsignment charge of \$2 per car on all hay received and switched to a warehouse or wherever else it is unloaded.

The matter was taken under advisement by the Commission.

A gang of grain thieves, four boys, was broken up at Peoria recently, who had collected in one place nearly a carload of stolen grain.

as well as clipper. There are two strong and positive air separations, one taking place as the oats pass from the shoe to the clipping cylinder through the wide separating trunk, and the second as the clipped oats are being discharged through the tail separator.

The clipping beaters are adjustable, adapting the machine to any degree of clipping desired. The beaters and cylinder case are made specially hard to insure against undue wear, the latter having openings cast upon chills. A strong current of air is continually passing through the grain while in the clipping cylinder, drawing off the clippings and light material as removed. The machine is perfectly ventilated and absolutely dustless in operation.

It is claimed there is no perceptible vibration to the machine when running, as the frame is built of extra heavy angle iron and braced in a manner to withstand the tension and jar incident to a proper clipping process. The cylinder is also carefully balanced so that no undue strain is obtained.

The Eureka Steel Oat Clipper occupies an important position in meeting every requirement in fireproof elevator construction, made possible by its compact, solid construction, large capacity and high-class work performed. The S. Howes Co., Silver Creek, N. Y., will promptly furnish upon application by those interested more detailed information and prices.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

A DISTRESSING AND FATAL ACCIDENT.

Editor American Elevator and Grain Trade:—Chas. Bjornberg, head weighman at the Grand Trunk terminal elevators at Portland, had his head caught between the cage of the passenger elevator and the bin floor on August 3. He died of his injuries on August 5. He had been in the service here for seven years and came East from Burlington, Iowa.

Yours very truly, E. P. BAUDER,
Foreman G. T. Elevators.

Portland, Me.

SHIPPING CLEANED OATS.

Editor American Elevator and Grain Trade:—In your issue of July 15 Broomfield & Colvin ask why oats are not cleaned before they are shipped East. I think the buyers are largely responsible for this. Our bids are all for No. 3 white oats or better. Why should we make them better? We get no more for choice, clean oats than we do for those that will barely grade No. 3 W. We give the buyer what he asks for.

We also think the place to clean grain is the point where it originates, and we will be glad to clean it when we get pay for cleaning it. Just as long as 31 pounds of oats and one pound of dirt and seeds will bring just as much in the market as 32 pounds of oats, just so long we will give them to you in that manner.

Truly yours, F. L. WHEELER.
Scotland, S. D.

AGREEMENT BETWEEN OHIO RAILROADS AND SHIPPERS.

Editor American Elevator and Grain Trade:—The following is a copy of the agreement entered into by all the railroads of the state of Ohio and the Ohio Shippers' Association. It became effective on July 14, 1905, and will expire on July 1, 1906:

For the purpose of securing uniform application of car service rules, the following instructions must be observed by the managers of all car service associations within the state of Ohio:

1. Car service charges will not be enforced where fault primarily is with the railroad company, for example:

(a) Failure to furnish within reasonable time empty cars upon order from shipper when suitable cars are available.

(b) Failure to place for unloading within reasonable time cars in yard, for which order for disposition has been received.

(c) Failure to move within reasonable time from industry track a car upon which car service has accrued while being loaded.

(d) Car service managers will not enforce car service rules where charges accrue due to bunching of cars or the placing of embargoes by railroads. Where consignee is located on other than the carrier line, and cars that may have been bunched or embargoed by one or several of the carrier lines accumulate in excess of the normal facilities of such consignee, then deliveries shall be so regulated between agents of lines interested, that the fault of the railway shall not react against consignee.

2. Car service managers will arrange for the prompt examination of all disputed claims for car service charges, so that, as far as practicable, only legitimate charges will be collected.

3. Car service managers will arrange with the agents of the railroads to provide prompt payment of all refunds to which shipper may be entitled.

4. Car service associations will arrange to change car service rules so as to grant uniformly throughout the state ninety-six hours' free time for unloading bituminous coal, coke, fruit and vegetables, and seventy-two hours' free time for the unloading of lumber, when such lumber is received in closed cars. (When received in open cars, forty-eight hours' free time will be allowed as heretofore.)

5. Car service managers will require agents to

notify consignees, who have telephones, of the placing of cars consigned to or ordered by them, on team tracks, after such cars have been placed.

6. Car service managers in the state will arrange to meet quarterly, or oftener if desired, with a committee from the Ohio Shippers' Association for the purpose of hearing appeals from the decisions of car service managers, and other complaints, and adjusting the application of car service rules under these instructions.

7. It is recommended to all railroads in the state that instructions be issued by their traffic department to all agents that bills of lading shall be furnished to all consignors on demand.

8. The railroads of Ohio will appoint a committee of three members on request to meet with a committee of three members of the Ohio Shippers' Association, to take up and adjust appeals and other matters that may properly come before that body.

Yours truly, J. W. McCORD,
Sec'y O. S. Ass'n.
Columbus, O.

NATIONAL HAY ASSOCIATION.

Editor American Elevator and Grain Trade:—You no doubt are aware that the Toledo convention selected Put-in-Bay Island as the place to hold our convention in 1906, provided suitable date and rates could be secured. If Put-in-Bay is found not to be available, Winona Lake, Indiana, is to be the place. This after canvassing Chicago, New Orleans, Niagara Falls, Kansas City, St. Paul and other cities.

The new Board of Directors met at 4 p. m., July 20, and after completing its other work decided to submit the date for holding our 1906 convention to the vote of our membership by postal card. Members in casting their votes will remember that the Hotel Victory opens June 15 and closes September 5, so the convention must be held between these dates. In giving preference as to dates members are asked to give a second choice, as a majority may select a date on which it would be impossible to go to Put-in-Bay.

Notwithstanding the extreme heat that visited Toledo during our stay, the convention just held was one of our best, and great interest was manifested and a splendid time was had by all.

The work of investigating firms who are thought to be doing a "shady" business, and reporting them promptly to our membership, was endorsed by the convention, and the secretary was ordered to prosecute this work with vigor during the coming year.

The annual report will be published just as soon as the copy of the Toledo minutes and some statistical matter can be gotten in shape. No firm will be listed in the directory who has not paid the annual dues for the coming year.

Thanking you in advance for your interest in the Association during the coming year, I am

Faithfully yours, P. E. GOODRICH,
Secretary.

Winchester, Ind.

APROPOS A NORTHWESTERN FEDERATION.

Editor American Elevator and Grain Trade:—I note in one of your editorials in a recent issue, referring to remarks made by myself at the annual meeting of the Tri-State Grain Dealers' Association, wherein reference was made to the National Association, that you have misunderstood the remarks which I made, inasmuch as you refer to my suggestion that a Northwestern federation of grain associations be arrived at.

However, in the notes of the meeting you have quoted me correctly, wherein, in discussing the National Association, I stated in effect that the interests to be best served in any association were of necessity those of the shippers; and inasmuch as the heaviest percentage of the shippers engaged in the grain business are located west of the Indiana-Illinois line, if it was determined that a national organization could not be arrived at, which would conserve the interests of those shippers to the best extent, it would probably then be wise to have a Western federation of the grain associations in existence west of the Indiana-Illinois lines, which would have as its object the conserving of

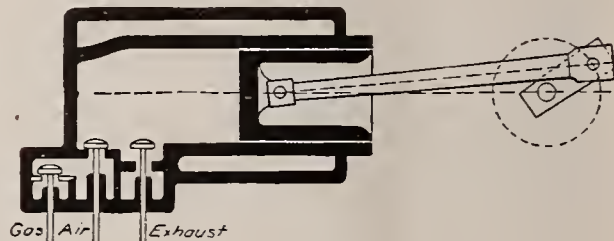
the interests of the shippers located in that part of the country; and would probably give great benefit because of the fact that the interests are practically identical in that territory. The above were, in effect, my remarks, my idea being to call to their attention the fact that the National Association has developed the fact that there are many interests to be served, and in most instances these interests are directly conflicting as to the element of benefits which they need. This I believe to be very largely responsible for the present condition of the National Association.

I have taken the liberty of calling this matter to your attention, so that you may rectify the misunderstanding in your editorial referred to, as the latter certainly places my remarks in a very undesirable light before the grain trade, giving them a wrong import, instead of what was really intended.

Yours truly, W. H. CHAMBERS,
General Manager.
Minneapolis, Minn.

STARTING A GAS ENGINE.

Trouble is often experienced in starting a gas engine, owing to the fact that in stopping the engine has made several revolutions after the gas was turned off, during which time it drew in air



alone. When the gas is again turned on, it becomes diluted with the air already in the cylinder, as well as drawing air in with it, so that a proper mixture of air and gas to insure combustion is not obtained.

To save trouble, under these conditions, says the American Telephone Journal, before starting up turn the flywheel until the exhaust valve is wide open, and leave the valve in this position until the burned mixture has had time to escape. Moving the piston back and forth several times will facilitate matters also. Then, with the exhaust open, as in the diagram, start the engine and there will be no difficulty in getting it to go.

WAGNER ON PRIVATE CROP EXPERTS.

Commenting on the private crop reporters for commission houses, and "crop reports" that "cannot be made too ridiculous to be believed," and the frenzy of traders who rely on the dicta of this kind of guessers, E. W. Wagner, Chicago, says:

"When such figures come from the Agricultural Department at Washington, it is called fraud, and is followed by an investigation which makes an European trip necessary for the men who arrange them; but an estimator for traders on the Board comes up smiling each season with no other change than new suckers to back the game. As anyone can start in this business, the wonder is that we do not have more of them working the same snap. The only thing for merchants, traders and speculators to know is how to apply these unfounded reports, and know the makers of them; then there is money in them for the operator who knows how to use a 'copper.'"

Do not trust to the visits of the inspector of weights and measures to keep your scales correct in balance; try them yourself every week.

Scale Inspector Nolan of the Iowa Association reports many scales out of order because of dirt accumulated about the levers. The box under hopper scales should be cleaned out often and the corners under platform scales about the ends of the levers.—Secretary Wells.

ANNUAL MEETING OF THE WISCONSIN GRAIN DEALERS.

The third annual convention of the Wisconsin Grain Dealers' Association was held in the St. Charles Hotel, Milwaukee, on July 20 and 21. President R. E. York of Portage called the first session to order on Thursday at 2 p. m.; and after announcing that Mayor Rose, who was to have delivered an address of welcome, was confined to his home by illness, read his annual address as follows:

In opening this, our third annual meeting, I wish to extend a hearty welcome to all members of our Association, and to all grain dealers and millers who do not belong I extend a cordial welcome. We invite friendly participation in all of our discussions. Representatives of trade papers, terminal dealers, and all others gathered here, who are interested in our organization and its work, are also welcomed. I trust we may make our aims and endeavors so plain that grain dealers who have not yet affiliated will see to it that the secretary has their applications before our sessions close. As president, and, therefore, having been in close touch with the work, I frankly and openly assert that this Association is working directly in the interests of country elevator men, or, in other words, Wisconsin shippers.

At the last annual meeting, your board of managers, working in hand with the secretary, was in-

petitor coming down the street, do not cross over on the other side to avoid speaking to him, but walk up to him like a man, and talk over conditions, straighten matters out, let him make a dollar or two and try and make a few yourself. It is a well-known fact, an open secret, that for the past few years, grain in Wisconsin has been bought on very close margins, too close, in fact.

For the benefit of some, I will positively state this Association does not assume the responsibility of naming purchasing prices to be paid by a dealer, but we do claim every dealer is entitled to a fair wage.

Prof. R. A. Moore of Madison delivered an address on "Wisconsin Barley."

James Templeton made a motion that the paper be printed and sent to the various presidents of farmers' institutes in the state to be read by them at their next annual meetings. The motion carried.

Secretary Potter told what other state associations had done toward educating the farmers in the use of good seed grain and added that he thought the work in Wisconsin of encouraging farmers in raising better and larger crops would be profitable to everyone interested in the Wisconsin grain trade.

The discussion of the question of admission of flour and feed merchants to membership in the

President York announced his committees, and the meeting then adjourned for the day.

FRIDAY, SECOND DAY.

The second day's session was called to order by President York at 10 a. m. The program was opened by an address on "Wisconsin Oats," by George McKerrrow of Pewaukee, president of the board of managers of the state board of agriculture. The president introduced Mr. McKerrrow as a man who had done a good work among the farmers of the state.

Mr. McKerrrow said that Wisconsin, taken as a whole, produced as good oats as any part of the United States. The main essential to good crops is good seed oats and a variety of seed especially adapted to the soil in which it is to be grown. Farmers do not grow as good crops as they might because they do not give as much thought or care to these essentials. Swedish No. 4 is a good oat for light clay soil. It has a rank growth and ripens very early. The Yellow German oat is adapted to heavy clay soil. Lincoln oats also are grown in many localities. The outlook for the present crop is very good throughout the state.

Secretary M. H. Potter read his annual report as follows:

In making this, our third annual report, as secretary, I want to briefly outline our accomplishments for the past year, and then, I desire to impart my views as to what we expect to accomplish during the coming year; or, in other words, enjoy a friendly chat, with a suggestion here and there made with a view of soliciting your kindly opinions. Bear in mind that your secretary is always at your service, and that you must at all times be willing to voice your needs in order to secure the best results. Being almost an absolute stranger to nearly all present, and, moreover, being somewhat new in the work, I cannot but feel a little modest in my boasts as to either what we have done or what we will do. Sufficient may be for me to say, I have no qualms, no fears of importance, for the eventual welfare and prosperity of the Wisconsin Grain Dealers' Association, because what has been accomplished elsewhere can be accomplished in good old Wisconsin every time. I only hope that you dealers will repose as much confidence in me as I have in you, and further, that you will be equally as sanguine of my success as I am of yours.

The field for work should prove interesting, without doubt, and while the conditions in this state, as I view them, are somewhat peculiar, yet my faith in our organization is indeed strong. In association work of this kind what is needed first of all to insure success is the proper nucleus. By that I mean working or active members. Manly men, level-headed men, thinking men, men of business, if you please, who are not the least bit narrow minded, but men having a conception of the terms, "general good," "general welfare," "moral obligations" and "legitimate trading," rather than the personal, private and selfish idea. We have plenty of dealers in Wisconsin who are of the former class, hence my strong belief that we are here to stay, that we are not a mushroom affair, and that our endeavors will prove a credit to our organization, to each and everyone affiliated therewith, and to the grain trade in general.

According to my records, I find that one year ago, we had a membership of 151 elevators. To-day, I am pleased to report a membership of 212 elevators, a clear gain of 61 elevators; this in the face of 33 withdrawals. Our advancement, you will note, has not been at all phenomenal, but steady and certain, and I believe we are getting the right kind of people interested. It is pleasing to note that the withdrawals represent, generally speaking, elevators which have changed hands, and dealers who are buying wholly on a commission basis rather than on account of any disinclination toward our work or because of the dues. This point being obvious, I cannot see wherein our showing is particularly disappointing, although it strikes me that it should be considerable better. If every dealer who is now a member will stand with me and make a personal and continued effort to get his brother dealer interested in joining, my report a year hence will be flattering without doubt, and by lending your aid you will further your own ends, and, if I am not badly mistaken, it will mean dollars and cents in your own pocket.

Railroad Claims.—A word about your claims against the railroads. First of all, I invite you to follow President York's suggestion and use your secretary whenever possible. This portion of my remarks may not appeal to the larger concerns, as they have in their employ competent men to prosecute adjustments of their railroad claims, but to the independent dealer, who has a thousand and one things to look after, let me offer my assistance. If your shipment shows a rank shortage, if your car is badly delayed in transit, or if you have any kind of a justifiable grievance against the transportation lines, let me know about it; put me in possession of the facts, and, I dare say, you won't regret the trouble. Having had considerable experience in this particular line of work, I may perhaps be able to bring arguments to bear and make recommendations which you would overlook; and then, again, your demands, if just, would be backed by our Association's influence. Don't overlook this proposition, and I promise you my best services. Perhaps in another year it will be found necessary to appoint a regular claim com-



WISCONSIN GRAIN DEALERS AT MILWAUKEE, JULY 21, 1905.

structed to draw up and have introduced before the legislature a bill aimed to regulate the assessment of car service charges, with a view to making the charge reciprocal. Such a bill was prepared and presented by Hon. O. G. Kinney, and it passed the Senate, it was immediately referred to the committee on railroads, and Secretary Potter and myself appeared before that body and put up the strongest argument we could, asking that a favorable report be made. The railroads were very ably represented, and fought the passage of our measure from every angle, but the committee, though outspoken in their opinion that shippers had a just cause for complaint, and that our position was well taken, argued that to make Bill 79A a law, the work of the railway commission would be hampered. They further contended that the passage of the rate bill would assure proper relief, and the final result was, as you all know, that our measure was killed. Our work, however, was not in vain, and I know of several cases where our efforts have already netted grain shippers a whole lot of good. We do not propose to stop here, but will go before the commission and do our level best to get them to adopt a set of simple and effective rules to insure us better service along the lines proposed in our bill. So much then for Demurrage Bill 79A.

On March 3 I received a letter from former Secretary Spoerri with his resignation inclosed, requesting it to take effect at once. I, therefore, called a meeting of the board of managers on March 9, and our present secretary, Mr. M. H. Potter, was chosen for the position. Right here, I wish to say a few words about our secretary and his duties. It depends very much on the individual grain dealer himself just how much good he receives from the Association. It is the secretary's duty to assist every member of this Association in matters that may come up regarding local conditions at your station, or any of the stations near you, and any disputes at terminal markets. He can help you in getting your claims settled, arranging meetings at local points and so on. In short, do not be afraid to call on him at all times, and if your requests are reasonable, I believe I am safe in saying you will seldom be disappointed.

One great and lasting good that this Association can accomplish is the promotion of better feeling—harmony, if you please, between local dealers. When you start out in the morning and you see your com-

Association was opened by C. H. Fintel of Genesee. He said that his trade had suffered somewhat from cars of feed shipped into his section and sold at wholesale prices. He was in favor of regulating the trade by the admission of flour and feed merchants to membership in the Association.

Mr. Dodge said that no dealer could compete with wholesale rates, and while there had been no difficulty in his territory he was in favor of admitting the feed merchants.

Mr. Templeton told of conditions in his territory, and said that at times his customers had bought of outsiders at a cent less per bushel than he could furnish them. Such a policy was a selfish one, however, on the part of the buyer and did not pay in the long run. He also told of the evil effects resulting from the habit of commission men of Milwaukee or others of going into the dealers' territory and bidding the farmers over the regular dealer, with, however, no intention of taking the grain. The result was that conditions were demoralized for the time being and the farmer often suffered a loss in not selling, when he was ready, to the regular dealer.

Mr. Templeton offered a resolution, which was adopted, that any member carrying on a scoop shovel business outside his own territory, or any commission house demoralized conditions by bidding farmers, be expelled from the Association.

On motion by Mr. Fintel it was decided to admit flour and feed merchants into membership in the Association.

W. P. Bishop of Milwaukee read a paper on the subject, "Milwaukee as a Barley Market."

mittee to work with me, but for the present, I am willing to tackle it alone. In this connection, I might add that I have a goodly number of copies of legal opinions defining the responsibilities of the railroads on shipments of grain delayed in transit, and anyone desiring a treatise of this kind can procure same through the asking.

Our 1905 Directory.—As you are aware, we recently put out a general letter, requesting necessary information for the correct compilation of our 1905 directory of Wisconsin grain shippers, and writer will spare no time or pains to make this publication the most complete ever gotten out. All I ask is your prompt reply to communications addressed you upon the subject and full advice regarding any changes since our last issue. Our new directory will be gotten up in somewhat different form than the last, inasmuch as we expect to index the stations, show a list of dealers operating more than one house and their headquarters, and in addition, it is my intention to designate the members in our Association, even though our number is not as large as it should be. We surely aren't ashamed to let the trade know who we are and where we are, in any event. All proceeds from advertisements will go into the treasury of the Association. Copies of this directory will be mailed to every grain dealer, every flour and feed dealer, and every seed dealer in the state absolutely free of charge, and hereafter we will aim to publish a revised edition each year and make it an Association project.

Type Samples.—I believe one of the best moves ever made by this Association was the adoption of type samples of barley. It is eventually going to overthrow the older custom of buying nearly all kinds of malting barley at one figure. First of all, we desire to see the farmer get a fair and honest price for his product. This is certainly his due, but the farmer who takes the proper care of his grain and takes pride in marketing his cereal clean is entitled to and should receive the best figure. If we will make a practice of holding to these grades a little closer, and not be inclined to overgrade, this idea of purchasing by standard grades will prove a money-paying proposition to you and the best kind of encouragement to the farmer. Don't underrate the importance of this matter.

Samples will again be gotten out this fall, and as I visit the exchange floor nearly every day, and as we are on friendly terms with the receivers, I shall aim to keep our members closely posted regarding Milwaukee values, based upon our samples. It is a fact beyond question that Wisconsin dealers are, generally speaking, paying a pretty stiff price at all times, and while this resolves itself into a matter of your own best judgment. I would suggest you get down to business, encourage harmony and good fellowship, and buy on grade, with a view of protecting the legitimate margin you are entitled to, figuring on your investment and your time given to the business.

To the line houses I would say, don't try to get it all at any figure, and thereby endeavor to put the small or independent dealer out of business, because this practice has too much of the Standard Oil flavor to suit, and, then, again, the reaction will sooner or later work to your detriment. To the independent operator, who is working in competition with a line house, let me strongly recommend that you come to a business understanding and make a few dollars rather than lose many. Please don't figure that because you have done the exclusive business in a certain locality for years, that no one else has the right of investment there, because you immediately put yourself on bad terms with the very man you should be most friendly toward. It is no longer thought necessary to continually fight your competitor to obtain the best results; that custom is, I am glad to say, fast disappearing, and in its place comes a little more honesty, more openness of practice and consequently fairer and better dealings.

Reciprocal Car Service Bill.—By this time, you all know that we have been licked in trying to secure legislation favoring the application of reciprocal car service rules; in other words, the Senate failed to agree with us that at the present time it was advisable to pass a law making it mandatory on the part of railroads either to furnish the shipper with cars or to pay a delayage charge. We brought nearly every influence to bear we could; our measure received the approbation of nearly all state associations, resolutions being drawn up and freely mailed favoring enactment, and I am glad to say our individual members stood pat and addressed strong letters to the members of both the assembly and Senate committees, but we fell down in the homestretch after the bill had safely passed the assembly branch. I may possibly overestimate our endeavors along this line, and our Association's influence, but I feel safe in saying that if the rate bill which provides for a railroad commission had not been introduced and passed at the last session, we would have been successful. Even in defeat, we have the satisfaction of knowing we held our own against all the arguments advanced by the representatives of the railroads and the Car Service Bureau, and further, that, being in the right, our organization has been brought to the foreground and will hereafter be recognized. My advice is that you appoint a legislative committee to work with your president and secretary with a view of continuing our efforts with the Railroad Commission, and for the purpose of watching and recommending the passage of any state laws which will prove to the interests of the grain trade.

Arbitration.—During the past year, I cannot find record of any cases having been referred to our board of arbitration, and this fact either speaks very well for Wisconsin dealers and the men they do business with, or it shows a disinclination to favor our official body with the settlement of disputes. I am inclined to believe the former theory more correct, but at any rate, let us use our board when necessary, and you will find their decisions are fair, square and equitable. Our arbitration rules are well formulated, following very closely those of the National Asso-

ciation, and they should fit any case which may be referred to our committee. I, therefore, can recommend no changes at the moment.

In closing, I would respectfully invite more personal attention to our work. If your market is not in line, report the trouble in detail, give me the facts. Your letters will always receive prompt acknowledgment and attention, and right here let me ask a little more business-like attention on your part in replying to my communications addressed to you. Please see that regular dues, which are not burdensome, are promptly remitted, for it takes some oiling to keep any kind of machinery running, and be assured we will practice economy so far as possible, but at the same time, we want the necessary funds to be able to prosecute our work with proper vigor at all times. Let us pull for and with this Association, and its usefulness will be apparent and satisfactory.

The treasurer's report showed: Cash on hand March 9, 1905, \$2.73; receipts from quarterly dues, \$1,127.85; contributions, \$110; total, \$1,240.58. Disbursements, \$1,133.73, leaving a balance on hand of \$106.85.

Mr. McKerrow suggested that the president appoint a delegate from the Association to attend the National Reciprocity Conference in Chicago August 16-17. A motion was made to this effect and carried; and a motion by Wm. Rahr prevailed that the expenses of the delegate be paid by the Association.

The question of dues to the Grain Dealers' National Association was taken up in general discussion, and on motion by S. N. Knudson the secretary was instructed to pay an indebtedness of \$60 to that organization.

The report of the committee on resolutions was read by Robert Clark as follows:

Resolved, That a vote of thanks be extended to the commission men of Milwaukee who so kindly entertained us at the banquet; also to all speakers who have been present and given us such good information on their different subjects; also to our president, secretary and board of directors, who have given their services and done much to further the interests of the grain men in the past year.

Resolved, That any member of this Association doing a scoop shovel business or handling the business of a scoop shoveler be reported to the secretary and such member be expelled from this Association.

Further, should any person or firm doing a scoop shovel business, who is not a member of the Grain Dealers' Association, be reported to our secretary, he shall report same to all members of the Association.

Resolved, That any grain dealer or buyer who canvasses from farm to farm, bidding on grain and seeds, shall be reported to the secretary, who shall take such action as he may deem advisable.

Mr. Schroeder from the auditing committee reported the accounts as read by the secretary correct.

Upon recommendation by Secretary Potter the Constitution and By-Laws were amended so as to admit receivers and commission men, as follows:

Receivers and commission men operating at terminal markets, where Illinois grain is received and handled, will be allowed to take out associate memberships in this Association upon regular approval by the board of managers, and the remittance of \$10 per year, payable in advance. Such members will not be entitled to a vote at our regular or special meetings.

F. J. Egerer read the report of the nominating committee. It was unanimously adopted and the following officers declared elected:

President—R. E. York, Portage.

Vice-President—Jas. Templeton, Templeton.

Board of Managers—S. N. Knudson, Mondovi; C. W. Cheney, Eau Claire; G. H. Schroeder, New Holstein; C. H. Fintel, Genesee.

President York appointed the following committees:

On Type Samples—B. G. Ellsworth, J. A. Mander, J. V. Lauer.

On Legislation—W. N. Shepherd, Charles Morey, Jas. Templeton.

On Membership—S. H. Simonson, A. G. Cox, R. A. Ritchie.

On Arbitration—R. B. Clark, H. Clausen, Louis Laun.

The meeting then adjourned sine die.

MILWAUKEE NOTES.

C. F. Van Wie, of Van Wie & Moorhead, attended from the Chicago market.

W. W. Cargill Co. was represented by Chas. Quackenbush of Green Bay and J. A. Grisdale of La Crosse.

Secretary Potter gives the official weight of President York, who has proven an ideal officer, and who was elected to another term, at only 380

pounds, and yet the president in his opening address said, "We trust that we shall gradually increase in size."

Joseph E. Schwab of the Milwaukee Bag Co. didn't attend very many sessions, but between times he entertained his mill and grain friends right royally.

Secretary Potter provided some very handsome badges for the session. The distinctive features were the picture of a grain elevator and the words: Harmony and Good Fellowship.

J. J. Quinn, secretary of the South Minnesota and South Dakota Grain Dealers' Association, was a visitor and was accompanied by J. M. Schaefer and G. Schaefer of Tripp, S. D.

R. B. Clark, chairman of the committee on arbitration, tried to bolt the convention to keep a Chicago appointment. Secretary Potter would not stand for it, however, and threatened him with immediate expulsion if he did not stay over for Friday's sessions.

P. M. Doyle and Joseph Longbotham of the Donohoo-Splinter Co. of Cuba City, Wis., brought with them some samples of zinc and lead ores from local mines, which they exhibited. The neighborhood of Cuba City is noted for the richness and variety of the zinc and lead ores and some of the mines there are good paying properties.

Those who were seen from the Milwaukee Chamber of Commerce were: L. L. Runkel, Peter Lauer, E. P. Bacon, B. G. Ellsworth, A. K. Taylor, James A. Mander, W. M. Bell, H. H. Peterson, A. R. Templeton, A. L. H. Johnstone, J. V. and A. E. Lauer, J. C. Ringans, C. A. Krause, John Beggs, H. H. Ray, A. O. and M. S. Lowry, Geo. J. Cahill.

What proved to be a very enjoyable affair was the third annual banquet. It was given to the dealers by the leading grain merchants of the Milwaukee Chamber of Commerce. The main dining room of the St. Charles Hotel was thrown open at 8 o'clock, revealing a handsomely decorated room and tables to receive the guests, and an orchestra at one end to enliven the occasion with popular music. After the courses were served President R. E. York rapped for order and introduced the speakers, who responded as follows: R. B. Clark, Chippewa Falls, "Why We Should Pull Together for the Common Good;" E. J. Lachman, Neenah, "More About Secretary's Work;" M. S. Lowry, Milwaukee, "A Few Short Sketches;" J. V. Lauer and W. P. Bishop, "Will Milwaukee Receivers Take Kindly to Associate Memberships?" James Templeton, Templeton, "Country Dealers Driving Out for Trade;" F. W. Frazius, Wichita, Kan., "The Bumper Crop of Kansas;" J. J. Quinn, "The Tri-State Association;" J. E. Schwab, Milwaukee, "A Good Story by a Good Fellow."

The following dealers came to Milwaukee for the meeting: Jas. Templeton, Templeton; E. J. Lachman, Neenah; C. H. Fintel, Genesee; R. E. York, Portage; Robert B. Clark, Chippewa Falls; Carl Hoertel, Amherst; H. H. Pagel, Stevens Point; S. N. Knudson, Mondovi; C. P. Tinkham, Fairwater; P. F. Boulay and M. B. Helmer, Fond du Lac; A. G. Cox, Osseo; F. J. Egerer, Chilton; T. E. Hill, Dousman; Wm. Sink, Markesan; F. W. Pynn, Hartland; Master Arthur Pynn, Hartland; Charles Gruhle, Manitowoc; P. M. Doyle and Joseph Longbotham, Cuba City; L. Laun, Elkhart Lake; George Schroeder, New Holstein; J. H. Timm, Plymouth; Wm. Rahr, Manitowoc; Charles W. Morey, Appleton; S. H. Simonson, Oak Center; Wm. Shephard, Whitewater; Charles Dodge, Wausau; Max Rahr Jr., Manitowoc; H. C. Timm, New Holstein; S. Marshall, Appleton; Edward Reinemann, Gale; G. A. Ruhmer, Medina; F. C. Wagner, Menominee Falls; Geo. McKerrow, Pewaukee; J. Altenhofen and J. Dries, Random Lake; C. Quackenbush, Green Bay; F. Schumacher, Port Washington; E. McIntyre, Waldo; P. Lauer, Lomira; J. A. Grisdale, La Crosse; J. W. Finnigan, Odell; H. Clausen, Fox Lake; Wm. Ritchie, Manitowoc; A. R. Willy, Appleton.

Send us the grain news from your neighborhood.

THE SHRINKAGE RATE SYSTEM AT LOUISVILLE.

The system of making through rates on grain and grain products to the Southeast via Louisville, Ky., known in the trade as "shrinking system," was under investigation by the Commerce Commission in July. The shrinkage amounts to 3 cents per 100 pounds on grain originating west of the Mississippi and 2 cents on that originating west of the Illinois-Indiana state line.

M. P. Washburn, chairman of the Southeastern Mississippi Valley Freight Association, explained to the Commission the system, as follows: "On grain originating west of the Mississippi River, when it is rehandled at Louisville and shipped to the Southeast, a reduction of 3 cents is given, in order to make the through rate equal to that via other river crossings. On grain originating west of the Illinois-Indiana state line, a reduction of 2 cents is given. When the grain is shipped to Louisville, the consignee receives an expense bill, which upon presentation to the inspector of the 'S. E. M. V. Association,' is stamped so that it is good for the reshipment of a car of grain at the shrunk rate. The inspector of the Association compares the expense bill with the incoming bill of lading of the railroad before he stamps it, and in that way it is found to be all right."

The complaining shippers maintained that by manipulation of expense bills, Louisville grain buyers are able to ship all their grain south at the "shrunk" rate, and to bid in the country more for grain than buyers not in a position to get the lower rate. They charged that expense bills are bought and sold and interchanged in such manner that the entire amount of grain going to Southeastern territory is shipped with the advantage of the 3-cent reduction. In proof of this the complaining shippers introduced evidence to the effect that firms bringing Western grain to Louisville will secure expense bills upon the grain and then consume the grain in Kentucky. The expense bills on such grain, they charge, are then turned over or sold to other concerns engaged in buying Indiana and Illinois grain, by which such grain is shipped to the South and East with the advantage of the shrinkage. Louisville shippers contended that they ship no more grain to the South and East than their Western expense bills allow, and that the bills are exchanged only as a matter of accommodation.

As an illustration, it was asserted that the Kentucky Distilleries and Warehouse Company annually ships between 700,000 and 800,000 bushels of grain to Louisville from Western territory, and that this company sells the expense bills so secured to other shippers who deal in grain brought in from nearby territory. W. A. Thompson, purchasing agent for the company, admitted on the stand that from 25 to 40 such expense bills ("never more than that") were sold or given away by himself or his clerks, the selling price being about \$1 each.

Mr. Washburn said that as long ago as 1901 his association found that many of the expense bills presented were "irregular," and that in consequence a system of inspection of the bills had been adopted (which was subsequently shown to be practically worthless).

Mr. Washburn also explained that 90 days is the life of an expense bill of this kind; and under questioning of the Commission he admitted that a shipper could buy grain in territory beyond the Mississippi River, and bring it to Louisville and there dispose of it, and still have expense bills for the reshipment of the grain. The shipper could then purchase a like amount of grain in and about Louisville and, by presenting the expense bill, ship it to the Southeast for 3 cents per hundred pounds less than the published rate. It was conceded that this could be done without question, as it was contended that the grain that had come in was entitled to go out on the through rate. It was then established that a great amount of grain is con-

sumed in Louisville, and naturally and logically Mr. Washburn had to grant that grain expense bills are worth 3 cents per 100 pounds of the amount on their face to persons who receive grain, but do not ship it out, and that if the latter have no further use for them, the bills could be disposed of to persons who could use them.

Commissioner Cockrell, who is just breaking into the mysteries of railroading from the traffic managers' point of view, apropos of this situation said: "It is a very peculiar thing that a railroad would stand calmly by and see itself robbed of 3 cents a hundred pounds and not make any effort at recourse. If that is true, it is an inducement for everyone to steal from the railroads; and business men will find that they have to steal from the railroads to keep their business on a par with that of others. First thing you know, everyone will be waiting for a chance to steal from a railroad."

A. S. Dodge, third vice-president of the Frisco System, said he had attempted to abolish the shrinkage system about two years ago, but had failed. He also remarked incidentally that, "There is practically no grain shipped from Louisville to the Southeast that originates in Indiana as long as an expense bill for grain from Iowa or Nebraska can be used in the shipments of Indiana grain."

"Why is it necessary to keep up this reshipping plan when a through shipment rate might be fixed?" asked Commissioner Cockrell. "Well, when a rate has been established in the South for twenty-five years, it seems to become sacred and cannot be changed," said Mr. Dodge, with a smile.

Louisville dealers, on the second day of the hearing, took the position that they were simply being protected against the other crossings by the shrinkage system there. T. C. Powell of the Southern Railway acted as local spokesman from the witness stand. It being conceded that expense bills are manipulated in the manner charged, Mr. Powell explained that although Louisville is granted a seeming advantage of 3 cents on grain shipped from St. Louis to Virginia cities, through Louisville, it is only to make possible the competition of Louisville merchants with shippers in St. Louis, who should avail themselves of the Cairo and Evansville routes, through which the same rate is granted as is given Louisville shippers, and the lawyers representing Louisville roads and shippers brought out admissions from witnesses that St. Louis, Cairo and Evansville shippers were trying to secure a decision from the Commission which would make possible a diversion of the trade now being handled by Louisville men to Cairo, Evansville and Memphis, under the guidance of St. Louis dealers.

Mr. Bullitt of the Henderson Elevator Company, on the other hand, was very severe in his references to the system. "In theory the adjustment of rates is all right," he said, "but the local consumption of grain leaves an immense surplus of expense bills that are used as a club to keep all competitors out of the Illinois and Indiana field. It works down to a plain common rebate. There is no pretense of maintaining any regular rates, and there is nothing else to call it but a rebate."

Mr. Bullitt illustrated his point by an actual case. He said that on July 3 a Louisville dealer bid 53½ cents for white corn at a town in Illinois on the Big Four Railroad. The tariff from that town to Louisville is 8 cents. He said that his manager happened to be in an office of a firm in Chattanooga the same day, and the Louisville man who had made the bid in Illinois offered the same corn on terms that would be less than the actual cost of delivering it at Chattanooga. He said the only explanation was that there was manipulation of freight bills at Louisville.

Mr. Bullitt introduced figures intended to prove that the volume of grain shipped out of Louisville with the shrinkage was too great to be proper, and he finally told the Commission that he believed the only way to settle the question would be to establish in Louisville a bureau of inspection for the purpose of getting the billings from all the

railroads of all the grain shipped into Louisville, and also keep track of every pound shipped out, so as to positively make certain that no manipulation could be possible.

Some of the Louisville people thought Mr. Bullitt "protested too much," as it was understood by them that he had some privilege of his own at Henderson.

Later on in the hearings—about the fifth day, in fact—the attorney for the Commission exploded a bomb under the Louisville men by introducing evidence to show not merely the manipulation of expense bills, thus far complained of, but the damaging fact that duplication, and even triplication, of expense bills was resorted to in order to get the benefit of the shrinkage on from two to three times as much tonnage as was really entitled to it. No less than sixty-seven expense bills, which it is claimed had either been duplicated or triplicated, were presented and identified by S. G. Reynolds, inspector of the Southeastern Mississippi Valley Freight Association, who said the bills had passed through his office and outbound shipments been granted on them. He could not account for their similarity, however, he swore, unless they had been duplicated. The bills presented were made out, with a single exception, for which no duplicate could be found, to a single firm of Louisville grain shippers, who were not, however, directly charged with the actual duplication, which was but another form of forgery or fraud. It was held, and, at least for the present, conceded, that the name of the Louisville shippers, which was on each of the duplicated expense bills, does not necessarily incriminate the firm, as testimony was produced by almost every witness before the inquiry that it was the custom of the shippers to interchange the expense bills of Western origin. These original bills might also have been made by others for the purpose of selling them to the shippers named. Mr. Reynolds, inspector of the S. E. M. V. F. Association, when closely interrogated, admitted that he did not check original waybills or bills of lading in making his inspection, and that he might have used the same bill of lading twice in inspecting original expense bills. He said that no checks were used, and admitted carelessness. He denied, however, that he had not examined some bill of lading for each expense bill presented, and said that he had not become careless to such an extent that the word of the prospective shipper was taken for the accuracy of an expense bill, when presented for certification.

It was also shown by the testimony of the general freight agent of the Southern Railway that while the expense bills read that oats was the grain to be shipped, the original waybill showed that corn had been originally loaded in the car and reshipped at Louisville under the shrinkage allowed by the expense bill calling for corn. On several occasions the original waybills read "barley," the conductors' slips and reshipping bills of lading also read "barley," but the attached expense bill under which the shrinkage was secured read "oats" and at other times "corn." These changes were found at times to be made in red ink, and the witness characterized the change as a "correction," but he was not closely questioned on the point.

Acting for the grain dealers of Memphis, J. S. Davant, commissioner of the Memphis Freight Bureau, appeared before the Commission during the hearing and filed a written protest, which embodied much the same complaints and charges as those already made by the St. Louis, Evansville and Cairo shippers. The complaint says:

First—We protest against the continuance of the shrinkage system at Louisville, and assert that it is characterized by deception and fraud.

Second—We allege that the conditions at Louisville are such as to render impossible the working of the shrinkage system in competitive markets.

Third—We charge that through the operation of this system Memphis has been deprived of a large share of the business to which she is justly entitled.

Fourth—We claim that under existing conditions, while the Louisville rate is equalized with Memphis from the West, the Memphis rate is not equalized

from many points in the North and from none at all in the Carolinas.

Fifth—In order to equalize and maintain a fair rate a new system of through rates is absolutely necessary between the West and Southeast.

The hearing ended on July 20 with a temporary adjournment to a day not named, but the continuance of the testimony and the hearing of arguments will probably not be called until September at the earliest.

The hearing was a matter of more than common interest to the other Ohio River crossings and to such Southern markets as Nashville and Memphis. Louisville shippers profess to be well satisfied, as the testimony tended to show practically the same methods of shrinking the through rate exist elsewhere at the crossings as at Louisville. The Nashville auditors at the hearing returned home before its close, having decided to keep out of it, in the belief that the disclosures would help that market anyway.

Cincinnati grain men were surprised at the statement of an L. & N. official of that city that Louisville does 20.32 per cent of the grain business with the South, against 6.57 per cent by Cincinnati, and now they think they know why, and in further corroboration, the Enquirer says that James Loudon, of Loudon & Co., on July 21 received a letter from a firm at Loudon, Tenn., declining an offer, stating that wheat was being purchased there at 2 cents a bushel less than the price offered by Loudon of Cincinnati. Instructions also were sent that "in shipping wheat to see that the billing shows 'origination west of the Mississippi River,' as this allows 3 cents per 100 shrinkage in milling in transit basis on the outgoing product." "The much-mooted question of 'discrimination against Cincinnati' by railroads," said Mr. J. D. Loudon, "has reached the acute stage. Orders for grain have been placed in this market, conditioned on '3 cents per 100 shrinkage' which is allowed Louisville shippers' on grain from certain territory. This Cincinnati roads positively refuse to allow on grain grown in the Ohio Valley, and, strange as it may seem, this action of the railroads is sanctioned by some of our grain men on the ostensible grounds of 'proper adjustment of rates.' . . . With present complications, lightning changes, innumerable charges, switching, car service, extra rates and arbitrary rulings, it is not strange that the sentiment in favor of government ownership grows apace."

MINNESOTA GRAIN APPEALS BOARD.

Governor Johnson of Minnesota has reorganized the State Board of Grain Appeals by appointing the following members:

Assigned to Minneapolis—Arthur Evenson, St. Peter; W. F. Kelso, Hallock; S. F. Thorson, Winthrop.

Assigned to Duluth—Philander McCarger, Fergus Falls; T. B. McManus, Crookston, and Theo. Thorson, Glenwood.

Arthur Evenson has been elected chairman of the Board.

These assignments are rather nominal than otherwise, it being the intention of the Board to conform to the wish of Governor Johnson that the two groups of the Board shall make alternate weekly shifts between Duluth and Minneapolis with a view to making the inspections in the two cities more uniform. The former Board was asked by the governor to do this, and on their refusing to do so, he appointed their successors.

The state law provides that any changes in the standards shall be made at a meeting to be held in September. "We have nothing to do with that matter at present," said Mr. Evenson. "We are not thinking of making any radical changes. We possibly may make a few slight ones. The Board is going to try to make good, although we realize that we cannot expect to satisfy everybody. There is no rule, no machine invented, for the grading of wheat, and it has to be left to human judgment, which differs and errs."

Of the members of the board who have retired E. H. Pugh has gone into business for himself, under the name of the Duluth Grain Sampling and Inspection Bureau, with office at 502 Board of Trade. G. J. Strang, another member, will go back to his former home at Alexandria, and will this fall be traveling through the Northwest in the interest of a Duluth commission firm.

RE MR. HYDE, STATISTICIAN.

Statistician John Hyde on July 18 surprised the country by handing his resignation to Secretary Wilson. Mr. Hyde's letter anticipated the charge he expected to be made, that he "resigned under fire": "My administration of the office I have the honor to hold has been constantly under fire from one side of the market or the other. Five times it has been investigated," he continues, "and on every occasion I have been vindicated." But he said he had come to the conclusion that the office was not worth fighting for, in view of the fact that



JOHN HYDE.

"a powerful organization" was "after him" and that his medical adviser informed him that "the continued fight upon me has already shortened my life." And Secretary Wilson, in accepting the resignation, praised Mr. Hyde's work and assured him that "with regard to the charges made against the integrity of the bureau of statistics, no facts have been brought to my attention implicating you in any way."

It is, however, stated that when Mr. Hyde, on July 22, sailed, unexpectedly to most of his friends, for Europe, he just escaped from two agents of the secret service who had been detailed to watch him. He got a start of about twelve hours on an ocean steamship before the authorities had any idea that he intended to quit the country. It is not understood, however, that he was wanted except as a witness before the grand jury at Washington. He might have remained away indefinitely unless indicted upon some extraditable offense, but he decided to return home and appear before the grand jury. It is not charged that Mr. Hyde was crooked, but his friends say he got into a panic, when the graft in the Agricultural Department began to leak, at the prospect of a scandal. It is explained that he was much influenced by Mrs. Gertrude Burch, his private secretary, who is accused, though not officially, of selling civil service questions and of having, independently of Holmes, had dealings with outside parties in the matter of cotton and other crop statistics. Mrs. Burch drove a fine team and bought a valuable residence in one of the suburbs of Washington, took trips to Europe and otherwise displayed evi-

dences of wealth that were not consistent with the amount of her income.

On July 31 Secretary Wilson made a pilgrimage to Oyster Bay, and at the conclusion of his interview with the President he is reported to have made the statement that the Bureau of Statistics would be entirely reorganized, the compilation of crop figures to be done independently by four men, whose reports will be compared in the presence of Assistant Secretary Hays, who will be the fifth member of the board.

MORE BUCKETSHOP BOTTOMS DROP OUT.

On July 20, on petition of Mrs. Amanda E. Stichtenoth of Cincinnati, the Equitable Trust Company of Chicago was appointed receiver for Sidmond ("Sid") McHie, a "broker," the Central Stock and Grain Exchange of Chicago, the Central Grain and Stock Exchange of Hammond and the Hammond Realty Company, all McHie's organizations. An injunction also was issued to restrain the Chicago National Bank from paying over money due McHie. McHie's attorney said the Central Stock and Grain Exchange was dissolved nearly three years ago, but under the law a corporation can sue or be sued for two years after its dissolution. He claimed that as almost three years had elapsed no cause of action could be maintained against his client.

A final decree was entered in the United States Circuit Court on August 8 perpetually restraining the Central Grain and Stock Exchange of Hammond, Ind., from obtaining the quotations of the Chicago Board of Trade. The original bill was filed against the Central Stock and Grain Exchange of Chicago, which was forced out of business. It was then reorganized as the Central Grain and Stock Exchange of Hammond, which took over the Chicago business.

The New England Stock and Grain Co. and Wimsatt & Co., an alter ego, operating shops in Connecticut, quit in July, with a promise, however, to resume. The bank account of \$40 was attached and the furniture levied on by the sheriff.

NEW KANSAS GRADES.

The Kansas Grain Grading Commission at the recent annual meeting yielded to the demands of the millers that scoured and clipped wheat be penalized and graded as No. 3. The rules for grading hard winter wheat for the new crop will therefore be as follows:

No. 1 Hard.—Shall be pure, hard winter wheat, sound, plump and well cleaned, and shall weigh not less than sixty pounds to the bushel.

No. 2 Hard.—Shall be sound, dry and reasonably clean hard winter wheat and shall weigh not less than fifty-nine pounds to the bushel.

No. 3 Hard.—Shall be hard winter wheat, sound, and some may be bleached, but not clean or plump enough for No. 2, and shall weigh not less than fifty-six pounds to the bushel. All scoured and clipped wheat cannot be above No. 3.

No. 4 Hard.—Shall be hard winter wheat, tough, or from any cause so badly damaged as to render it unfit for No. 3 hard.

Rejected Hard.—All very damp, very musty or very smutty, trashy, stack-burned or dirty hard winter wheat.

The petition for new grade for "Turkey Red" was rejected as impracticable.

Rope power transmission for all the main drives is far superior to belting. It takes no more power, lasts longer and is more silent.

As a rule careful hay buyers require that the hay be in the stack or mow about a month before baling. Hay baled sooner than this is almost certain to be moldy in the center of the bale, and if cured so thoroughly in the field as to permit baling direct, its quality would be apt to be injured by overcuring.—Country Gentleman.

MICHIGAN HAY ASSOCIATION.

Michigan hay dealers held their fifth annual convention August 3 and 4 at Jackson. About 150 receivers and shippers were in attendance. The first session was called to order August 3 at 2 p. m. by President Smith Young. Mayor W. W. Todd welcomed the hay dealers to Jackson, and John L. Dexter of Detroit responded for the hay men.

The president's annual report reviewed the work done during the past year, and contained the recommendation that, as an Association, the members stand very close to the National Association. In regard to conditions the report said:

The past year has been a hard one for the hay shipper of Michigan—probably the most disastrous in a financial way of any year we have had in a decade or more. Many have suspended business entirely, and those who have kept in the ring have had but little besides hard work and discouragements to show as results. Many sections which heretofore have been buyers have been sellers in direct competition with Michigan shippers, and have had the advantage in the way of freight rates. The conditions have been peculiar and difficult; the Michigan crop was short and the Eastern crop was extra large, which made a low market, and the short crop in our state made the farmers hold for good prices, making it almost impossible to buy on a respectable margin. It was like rowing upstream all year with no time to rest on our oars and feel that things were coming our way.

Prof. C. D. Smith of the Michigan Agricultural College gave an interesting talk on plants and methods of hay production. He said there is a good deal of No. 1 hay in New York and Michigan, and a good deal which the farmers say is No. 1; and he didn't know how the commission man would convince them it isn't. The farmers have put up a lot of hay which they call No. 1, because it has a nice green color. The fact that it was cut late and is chaffy cuts no figure with the farmer.

His study has convinced the professor that timothy is king of all grasses; and it ought to be so, as its harvest extends over a period longer than for any other grass. But it must be harvested before the bloom is all off of it. If this is neglected, no matter how green it may be, the consumer does not want it. He argued that farmers must be taught to cut timothy before the wheat harvest, and unless they do this there will not be much No. 1 hay. Another point in favor of timothy is that it is practically free from plant disease of any kind.

Professor Smith referred briefly to alfalfa, which he said would grow in Michigan under favorable circumstances, and had a few words to say relative to the value of clover. He said that a timothy meadow ought not to be allowed to stand for longer than two years, as there would never be a No. 1 hay from a meadow that has stood long enough to become filled with weeds. He thought timothy and clover should be included in a proper rotation of crops, and advised this order: "Timothy, timothy, corn, wheat, timothy and clover."

After the appointment of committees on nomination, resolutions and site the directors' annual report, prepared by George F. Dimond, Mayville, was read by C. E. Noyes of the Stockbridge Elevator Co., Jackson.

In regard to business the coming season the report contained the following recommendation:

"Your directors recommend that our members do not repeat the mistake of last year, but buy at a price that will have a fair margin. While the crop in Michigan and the several other hay producing states is very large, the percentage of No. 1 timothy varies from 5 to 25 per cent. With so small a percentage of No. 1 timothy it is evident that the range between this grade and best mixed hay will be very wide—perhaps not less than \$3 per ton. It will, therefore, be necessary for our members to use the utmost caution in making purchases of hay in the barn or stack."

W. A. Bunting, Kalamazoo, reported for the transportation committee. For the uniform bill of lading committee George C. Warren, Saginaw,

reported. This report reviewed the work done during the past year. It contained a brief statement as to the present status of the question and concluded:

"Just what the ultimate result will be no one can safely predict; however, that the so-called uniform bill of lading as originally drafted containing the numerous objectionable features will never be made effective, seems a certainty."

The secretary-treasurer in his annual report called attention to the change in policy by the present administration in regard to members who have neglected to pay their dues. Under the new plan such members have been dropped from the roll of membership after their attention had been called to the delinquency. The report said further:

"It is hoped the trade in general will come to understand more fully the necessity of prompt payment of dues and come to a fuller realization of the benefits to be derived through associations like our own, properly financed and conducted."



C. E. NOYES, JACKSON,
President Michigan Hay Association.

In conclusion the report contained the following suggestions:

First. Pay more attention to membership qualifications; make a membership in the Michigan Hay Association a certificate of character, honesty and integrity and an emblem of business probity. Make your qualifications for membership rigid; permit no unscrupulous shipper or dealer to get or hold a membership.

Second. Invite from members a statement of all complaints against receivers; provide the necessary machinery for proper investigation, and furnish members reports of such findings.

Make the Michigan Hay Association represent Michigan interests; secure, compile and furnish crop and other information to members only. Make your secretary's office a general bureau of information.

I would say that if the Association were financially able now, but as soon as it is, employ for your secretary a competent and capable man endowed with special ability along association lines of work, and who is not personally engaged in business, who can give his whole time and devote his every energy to the interest of the Association and its members.

Two very interesting papers which met with hearty applause followed. They were, respectively, "Membership in Our Association and Its Advantages," by B. F. Warner, Paw Paw, and "Reciprocal Demurrage," by J. A. Heath, Lenox.

Mr. Dexter, Detroit, thought all members could take a lesson from Mr. Heath's paper, saying, "When a letter is received from our president relative to putting a bill through the legislature, we should respond. If we would work unitedly we could accomplish results far in advance of what we have so far done."

On motion of Mr. Noyes, Jackson, the thanks of the Association were extended to Messrs. Warner and Heath for their papers.

Mr. Heath thought it would be well if the members would tell of conditions through their respective sections, and reported for Lenox. The responses to this call follow:

Lenox.—Have large crop of hay. Fair proportion of No. 1 hay and very small proportion of clover hay. Not a great deal of damage from rains.

Paw Paw.—Have put up usual amount of hay; rains continued from June 30 to July 10; the next few days were showery, but since then have had excellent weather. It is impossible to say how hay will come out of mow. On account of catchy weather the farmers hurried to get their hay put up, with consequent liability of damage.

Casnovia.—Crop large; proportion of No. 1 small; crop stood after rains and was over ripe. Is also mixed with clover. Most of the hay will grade No. 2. Conditions are the same in Kent County.

Mt. Morris.—On account of late cutting heads on timothy hay in our section are brown. Crop was late, anyhow. Have crop 25 per cent larger than last year, 25 per cent is worthless for shipping purposes, but good for farm feeding, 25 per cent will run No. 1 and 25 per cent clover mixed.

Kalamazoo.—Hay is in better condition than was anticipated, 25 per cent is timothy, 50 per cent mixed and 25 per cent clover of new crop.

Owosso.—Full crop in county, but no strictly No. 1 timothy; 25 per cent is worthless for shipping, 50 per cent is No. 2 timothy and 25 per cent clover and clover mixed. Good timothy has been neglected to harvest wheat; stalks are green, and the heads brown. If quality remains as it looks may have some No. 1, but do not think it will cure out as No. 1.

Responding to a call for a statement as to conditions in the East, A. D. Miner of Dillenbeck & Miner, New York City, said the New York crop will average about the same as in Michigan, i. e., 25 per cent No. 1, 50 per cent No. 2, and the balance clover mixed.

Canada has a good, straight crop of hay, but it was caught in showers at harvest. Outside of the Mohawk and Hudson River valleys the New York hay crop is above the average in quantity but below average in quality. Jefferson County, last year, had a very fair quality of timothy hay; this year the same fields are one-third clover. This same condition applies all through central New York. In the Hudson River Valley the crop is terribly burnt. In the Mohawk Valley the crop also is light. New Jersey has a light crop this year.

Mr. Steen, Baltimore, said the Maryland crop was light. Rains came late, and there was a good deal of flood. Timothy will be stained.

Mr. Smith of Boston said they depend upon the West, and he hoped the Michigan shippers would find some good hay, as they can get all the poor hay they want nearer home.

Mr. George S. Bridge, Chicago, gave a comprehensive talk, covering conditions through the sections tributary to Chicago market as follows: Indian Territory has a splendid crop of hay—much finer than last year. Kansas crop seems to be lighter, reports indicating half a ton to the acre. In Nebraska, along the Union Pacific and in the eastern and northern part, a great deal of hay is almost ruined on account of excessive rains. Iowa and Minnesota have a good crop; the weather has been good and the quality of the hay is good. Chicago does not get so much prairie hay from these states, most of it coming from Missouri. In Wisconsin last year there was no surplus. The entire state this year has a good crop secured in good condition. Clover is a good crop, due perhaps to the favorable winter. Illinois is fully up to normal. There is a larger crop than generally in the northern portion, but the southern part of the state has only about 75 per cent of a crop. There is comparatively little No. 1 hay. In Northwestern Indiana the crop is bet-

ter than was anticipated, but it was not harvested in as good condition as the Wisconsin crop.

In response to an inquiry Mr. Bridge said there is no straight rye straw shipped to Chicago. He thought the acreage of rye was larger than last year. Considerable tangled rye straw is coming to market.

C. W. Bowker of Worcester, Mass., said the hay crop in the Northeastern states was lighter than usual, and anyway what hay is raised there would not offset the price much. He thought too many buyers are starting up and are prone to pay too high prices for hay. He said hay was like butter. Buy all good hay and good butter and you'll get all the poor butter and poor hay you want.

In the matter of paying too high prices for hay, Mr. Dexter of Detroit said: "If we can't buy hay right we ought not to buy it. If we as buyers hold out the farmer will realize that he would have to hold his hay or let us have it at a right price. Buyers lost money on last season's crop on account of being strung up by the farmers for higher prices."

SECOND DAY'S SESSION.

Friday morning's session was opened by the reading of a paper by Horace Lamb of Imlay City on "Lack of Consideration Among Local Dealers for Their Competitors." He thought that while some of the regular dealers were at fault, the lack of consideration comes principally from the beginner in the business.

A brief discussion followed in which it developed that apparently there was but little trouble through the state worth worrying over.

F. E. Leighton of Jackson said that shippers in that part of the state are on friendly terms. Trouble, when there is any, comes almost entirely from the inexperienced buyers who are misled by the circulars issued by the commission men in the various markets, overquoting their market, and consequently the buyers offer a little more for hay than they could really afford to pay, which in a short time results in a glut on the Eastern markets.

The relation of the shipper to the commission man was the subject of a paper read by F. E. Leighton of Jackson. This paper was criticized severely, as it was thought it was unfriendly to the commission merchant and inimical to his interests. Mr. Leighton explained, however, it was not his intention to convey the idea that he wished for the elimination of the commission man as a factor in the hay business, but he thought there should be a change in the conditions or methods of handling hay in the various markets. The chief complaint he had to make was that the commission man assumed no share of the responsibility which the shipper bears. Mr. Leighton said there are at present two ways open to dispose of the produce they handle. In nearly all of the large consuming centers there are two classes of merchants dealing in this product. What relation does each bear to the shippers and to the welfare of our business as a shipping business? In considering the shipper's relation with the buyer he thought a written contract between the buyer and the shipper, under the terms of which a stipulated price would be paid for hay of a certain standard of quality, and a designated determination of weight would put the business on a basis of either profit or loss, and that "being good business men it would be regulated to a sound basis of a fair profit for all. The business of the shipper and buyer will be regulated by the laws of supply and demand. There will exist between them, because of the mutual necessity, a thorough understanding of the business which can result only in placing it on a sound basis of equality and stability."

In considering the shipper's relation with the commission man, he said the commission man assumes no responsibility. He possibly honors a sight draft for three-fourths of the value of the invoiced contents and on arrival of the shipment sells to the best of his ability. He can sell at the market price or below the market price of the grade con-

tained in the car and the shipper will have no recourse because he has no contract, and no law will compel the commission man to sell better than to the best of his ability. On the other hand, if the draft exceeds the net receipts of the commission man, he can compel the shipper as a member of the hay associations to honor a draft for reimbursement.

He said further in regard to the commission merchant: "The fact is, I think, undisputed that the commission man is doing business for his commissions; his interests are to increase consignments. At every turn of the market he sends broadcast to every dealer whose name he can secure (responsible or otherwise) circulars commenting on the improved conditions and indications, advising consignments and prophesying better prices. We have a great many new and inexperienced buyers who on the strength of the advice contained in these circulars rush out and offer to the producer prices for hay which are ruinous to themselves and the interests of those who wish to buy on a basis of stability. Another result of this continual solicitation is at times a large amount of unsold hay in all of the Eastern markets. Dealers find it impossible to move it, demurrage accrues, sacrifices are made in prices, and railroads are obliged to place embargoes restricting the shipment of hay until the terminals are relieved of their congestion."

Mr. Leighton thought a contract such as he described would eliminate the condition just described, and said further: "When you discard the practice of consigning hay the laws of supply and demand will give you not only a higher market, but a market free from an accumulation of unsold and unwanted hay which is continually a drag on the market price of good hay."

This paper drew out quite a spirited talk from Messrs. Steen of Baltimore, Bridge of Chicago and others. Mr. Steen said that if the shipper would instruct the commission man to sell hay on the market price and the hay was accepted by the commission man on those terms, the shipper had recourse if the hay were sold below the market price, and added that all changes that favor the shippers in all terminal markets are the result of the work of the commission men.

Mr. Bridge thought there was a feeling between the shipper and the commission man that should not exist. If the shippers feel that they can market their hay without salesmen they don't need the commission men. The commission men are in reality salesmen in the big cities for the shippers. Salesmen always are necessary in all lines, and for the time being, at least, he thought the trade would have to work along present lines. Mr. Bridge referred to conditions in Chicago fifteen years ago, when the commission man sold to the consumer and the consumer solicited shipments in the country. Associations were formed and conditions adjusted so that now both handle the hay at a profit. He thought the solution of the whole trouble would be the building of terminal warehouses in all the big markets, which should be operated by hay men with fair charges for storage, etc.

F. D. Dusenbery of New York told of the work in prospect toward the erection of a union warehouse for the New York markets.

Raymond P. Lipe, Toledo, said his experience had taught that the solution of the problem of securing steadier markets was the establishment of warehouses at different points.

The work done by the arbitration committee during the past year was reported on by the chairman, F. L. Young of Lansing.

Hon. C. E. Townsend of Jackson gave a masterly address on "The Transportation Problem." As a token of the appreciation of the members of the Association for the work Mr. Townsend has been doing and endeavoring to do for the shipping trade, he was by unanimous vote made an honorary member of the Association.

In the matter of buying hay on grade, Albert Todd of Owosso said this was one of the most important propositions the members could con-

sider at a convention, and that they ought to be more careful about the kind of hay they buy and ship. If they would pay the farmer only for the grade they buy, he thought it would tend to stimulate the market.

J. E. Crane of Eaton Rapids said his firm uses a blank contract form, printed in duplicate, and whenever they buy hay the grade bought is specified and they pay for the particular grade called for under the terms of the contract. He said this plan has worked out very successfully.

Seth B. Rubert, the shipper who has "never in his life sold a car of choice timothy hay," thought the commission men and the track buyers have captured the Association. He had more or less complaint to make as regards grades on shipments, particularly when shipped on a down market, but thought that matter could be adjusted. He was of the opinion that there should be some means of redress for the small buyer and that "something" ought to be "regulated," but just what that "something" was he did not clearly define. The discussion was on "How to Make the Hay Business a Success," but it was prostituted to a discussion as to whether or not Mr. Rubert had secured fair treatment on a case which he had submitted to the arbitration committee. The matter was referred to the new board of directors.

The report of the committee on nominations was received at this time and adopted. It provided for the election of officers for the ensuing year as below:

President—C. E. Noyes of the Stockbridge Elevator Co., Jackson.

First Vice-President—B. F. Warner, Paw Paw.

Second Vice-President—Horace Lamb, Imlay City.

Secretary-Treasurer—E. C. Forrest, Saginaw.

Directors—Smith Young, Lansing; F. E. Nowlin, Albion; Geo. F. Dimond, Mayville; W. A. Bunting, Kalamazoo; Albert Todd, Owosso; M. Van Buskirk, Flint.

The report of the committee on resolutions was received and adopted. The committee on site recommended either Kalamazoo or Detroit as the place of meeting for next year. The report was approved and on motion Kalamazoo was decided upon.

On motion of Mr. Heath, Lenox, \$100 was paid to the secretary as a consideration for his services in behalf of the Association during the past year. It was decided that, beginning with August, 1906, the annual dues in the Association shall be \$3 instead of \$2 as at present.

The meeting then adjourned.

JACKSON NOTES.

The reception committee wore red badges.

One commission man from Chicago was on hand, George S. Bridge, of Bridge & Leonard.

The suggestions contained in the secretary's report are good ones for any association to consider.

At the conclusion of his address the members made Professor Smith an associate member of the Association.

A remarkable fact in connection with the Jackson convention is that no Philadelphia or Pittsburgh receivers were represented.

From Baltimore there were Harry Elgert of J. A. Manger & Co.; Egil Steen, A. A. Kuhl, representing G. A. Hax & Co., and John G. Bauernschmidt.

Harry Elgert captured several cars of hay to look after in Baltimore and wore a wilted boutonniere with which he insisted there was no sentiment attached.

Even though "Andy" Kuhl was around getting business, his firm, Hax & Co., Baltimore, sent by wire a message of greeting and wishing success to the M. H. A.

The Stockbridge Elevator Co. did its best to entertain the delegates. Any way you turned you were sure to run against either Noyes, Sheldon, Winchester or Vliet—sometimes all at once.

The official badge consisted of a white enameled disc suspended by a short ribbon from a bar on which was stamped either "guest" or "member." Pink ribbons indicated the members and blue rib-

bons the guests. On the disc were a wolverine and the words "Michigan Hay Assn., Jackson, Mich., Aug. 3-4, 1905."

The crop rotation proposed by Professor Smith was referred to a practical farmer the day following the convention. He concurred in the professor's views and said he thought the rotation was a good one for all 'round good results.

John G. Bauernschmidt of Baltimore presented shippers with a "terrapin" paper weight with the suggestion that he could help them swim out of trouble if he had an opportunity to handle their hay business.

Egil Steen's card was unique and "catchy." There were two bright copper cents inserted in the card to help out the reading, which told the shipper "there's a heap of cents" in trying a shipment to his firm.

From New York were W. C. Bloomingdale, F. Williams, F. D. Dusenbery, E. D. Miner, S. A. Vroman, who has recently gone into business on his own hook with John A. Schaefer as a partner, and E. H. Bedell, representing H. G. Kress & Co.

Under the blind name of "smoker" delegates were given a good deal besides cigars and smoke Thursday night. A four-round boxing match was pulled off and the Withington Zouaves went through their regular drill, including the scaling of the wall. Several piano and vocal selections followed, after which Egil Steen of Baltimore gave a number of readings.

Messrs. Bloomingdale and Williams of New York, in an automobile, went touring through Ohio for a few weeks preceding the convention, looking up prospects for business. They think an auto is the finest thing that ever happened for the commission man to use when soliciting business in person, as it does away with studying timetables and loss of time in small one-train-a-day towns. Frank Williams likes it, but he is carrying a perpetual blush around with him as his reward for holding his face out in the sun, while Will Bloomingdale sat back in his seat and enjoyed the scenery.

WROTH ON THE STATISTICS BUREAU.

"While the rascality and lack of good faith, which investigation has brought to light in the statistical bureau of the Agricultural Department, are to be deplored, the suggestions which have been put forth by reputable merchants and prominent men under the lash of outraged feelings, in which the abolishment of the bureau is advocated, are almost equally as deplorable and reprehensible," said Secretary Henry A. Wroth of the Baltimore Chamber of Commerce.

"The statistical bureau is a necessary adjunct of ordinary trade. From it the farmer, the factor and commission man, the banker, the manufacturer, the jobber and the transportation companies all draw their inspiration as to the conduct of business during the ensuing crop year. For obviously, if crops are abundant, all these various lines have no hesitancy in branching out on a large scale in an effort to do business, assured that the consumer will be possessed of ample money to pay his bills, whether for goods supplied or for transportation.

"The talk, then, of abolishing the bureau because one man in an important position abused his trust is truly assinine. To improve the bureau should be the aim of everyone engaged in trade, no matter in what particular direction his energies are employed.

"The view, so frequently advanced, that the bureau's conclusions are mainly an aid to the speculator is ill advised and untrue. The speculator would suffer the least by the abolition of such an institution, because he would spend his money and obtain the information for his own use, allowing the public to know only so much of the facts as suited his convenience and interests, and what people are pleased to term 'legitimate trade' would be all at sea as to the facts."

THE SUPERIOR-DULUTH FIGHT.

The fight at Superior-Duluth over the matter of grain inspection has taken a lop-sided form, the Great Northern Railroad Company having, on August 1, leased its entire elevator system in Superior to A. D. Thompson & Co. of Duluth, who will operate the elevators (6,500,000 bushels' capacity) as private houses, receiving only the firm's grain and issuing no warehouse receipts. The Globe Elevator Company on July 2 also became a private house under the law. As under the new Wisconsin law only grain going into public elevators is required to be inspected and weighed, there seems to be no occupation left for the newly created inspection department, unless shippers take a hand in the fight on behalf of Wisconsin inspection, it now appearing that one of the agreements of the lease of the Great Northern Elevators to Thompson & Co. is the stipulation that the lessees shall buy all Wisconsin-inspected grain that may be offered. This stipulation is at least in line with Superior's agreement made with the Great Northern, upon the basis of which the Superior men had the law amended to allow Minnesota inspectors in Wisconsin.

On August 4 Minnesota weighmen and inspectors were again placed in the elevators and mills of Superior, at the request, as the Minnesota Railroad and Warehouse Commission say, of their owners, the Duluth-Superior Milling Company, the Terminal Elevator Company, the Peavey System, A. D. Thomson & Co., who have leased the property of the Great Northern Elevator Company, and others. Under an amendment to the Wisconsin law, adopted just in the close of the session, the presence of Minnesota officials under these conditions is allowable. The Minnesota Commission, in their announcement of program, graciously add:

"The action of these elevators does not prevent the inspection of grain under the Wisconsin system. The yards are free to the Wisconsin inspectors and anyone wishing grain inspected by them can have it, but the elevator companies and the milling company also plainly indicate by their action that they want Minnesota inspection."

Of course, this coup is influenced by the Duluth Board of Trade, and is countenanced by the Minnesota Board of Railroad and Warehouse Commissioners, who prior to August 1 announced their purpose to withdraw their inspectors from Wisconsin, but who on August 3 revised their purpose so far as to say, through Chairman Staples, that:

It is not the purpose of this department to defy Wisconsin authorities, nor to buck Wisconsin law, nor in any way to evade the laws of Wisconsin. The individual owners of elevators in Superior and West Superior claim that they have the right to invite whatever inspection they wish, and they have asked for a continuation of the Minnesota inspection.

Wisconsin has passed an inspection law which provides that all grain inspected on the tracks, or in public houses, must have the Wisconsin inspection. As a matter of fact, there is not a public grain warehouse in either Superior or West Superior. Every house is owned and operated privately, and every bit of grain that goes into these houses is owned by the owner or lessee of the house.

These operators claim that in order to sell their grain they must have the certificate of the Minnesota inspection bureau. They say that if the courts hold that they cannot invite whatever inspection they want, they will have to load their grain into vessels and take it to the Duluth docks, and ask for an inspection of it there, in the holds of the boats, so that they may have the benefit of the Minnesota certificate of inspection.

The people loading grain out of Superior and West Superior are all private operators. Their grain is sold on a contract which requires them to furnish a certain grade, and the purchaser insists that that grade must be the Minnesota grade, as Minnesota's inspection is known and approved in every grain market in the world.

We do not claim the right to inspect grain on the track in Wisconsin, for that is public grain. Nor would we claim the right of inspection in a public warehouse, were there such an elevator. The inspection of the privately owned grain is simply a matter of convenience for the shippers. If Superior or any other Wisconsin point wished to send inspectors to Duluth to inspect private houses, at

the request of the owners, we would be only too glad to admit such inspection. In fact, Chicago has repeatedly sent inspectors to Minneapolis to inspect grain which was sold by private operators subject to the Chicago inspection.

We are operating in Superior and West Superior now on the written invitation of the owners or lessees of the elevators there, who have asked us to inspect their grain in their own houses, so that it may be sold on the Minnesota inspection. Among these houses are the A. D. Thompson & Co.'s line, operating the three Great Northern elevators; the Peavey Company, operating the Globe Elevators at West Superior and the Belt Line Elevators at Superior; the Cargill system at Superior; the Itasca Elevator Company and other smaller institutions.

The feeling between the two cities and their Boards of Trade is, of course, very bitter, as is evidenced by the following statement by the Duluth Commercial Record, which speaks, however, on its own responsibility and not as the mouthpiece of the Duluth Board of Trade, of which it is the at least nominal organ. The Record says (August 4):

In the first place, the Superior Board of Trade is dead—absolutely dead, beyond hope of resuscitation; and it is with some regret we see it go, as it was one of the few things ever built up by Superior people. Their main efforts in the past were always expended in tearing down something that other people built up. And even in this matter they were not content to let well enough alone. For ten years past, the three or four concerns doing a grain business in Superior were permitted to sell their grain to Duluth; had all the advantages of the Duluth Board of Trade, its quotations, facilities, etc., without owning a membership in Duluth, or paying dues, or office rent or tax of any kind. In other words, they have sponged the facilities that cost the Duluth Board of Trade \$12,000 to \$15,000 a year to maintain. At the same time they were slandering, maligning, in the country, the very firms whose tolerance permitted them a living. Undoubtedly that condition would have gone on indefinitely, if their operations had been confined to snarling and yelping; but when they attempted to invoke the aid of special laws, conceived in iniquity, to hinder and prevent legitimate business, it was time to turn.

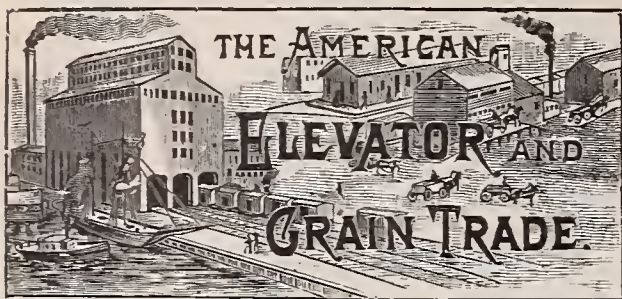
In case the people of Superior do not realize what has happened, we will say: There is not an elevator in Duluth or Superior in which a Superior Board of Trade man can place a car of grain except Elevator E, at Duluth, and as that is operating under Minnesota inspection, his car would have to take Minnesota inspection. Further, there is not an elevator, mill or grain shipper, connected with the Duluth Board, to whom the Superior man can sell a car of grain, without paying the regular commission charged everyone.

Possibly the intelligent grain men of Superior are not wholly to blame for the condition that they have brought on themselves. They were undoubtedly egged on by the "man in the street," the "bunch grass eaters and grasshopper jumpers," who have always been ready to go after what other men had constructed. But, if this be the case, they have simply, for them, killed the goose, etc. The Duluth Board of Trade and all its members are now a unit in this matter, and if Superior wants a new Board of Trade let them do as Duluth did, go out and build it—build it from the ground up, and it will then be all their own.

One other matter. Talk of tax reprisal is foolish. We have heard of industries being taxed out of existence, and we desire to say to Superior and Superior people, and this knowledge is exact and accurate, that the grain business on either side of the bay cannot stand another cent of taxation. Further taxation would not only drive the business from Superior but would drive it from the Head of the Lakes.

The Superior Board of Trade and the Wisconsin Board of Grain and Warehouse Commissioners have retained attorneys to protect their respective interests in any legal difficulties that may arise in connection with the fight which is expected to be made on the Wisconsin inspection by Minnesota people or the enemies of the new Wisconsin grain bill. So far the threatened fight is in statu quo, as practically no grain of any kind has been received here since the Wisconsin inspection went into effect, and it is hardly possible that there will be any amount of business before the last of this month, and the intervening time will be utilized by the opposing sides in drawing their lines of battle.

The press in Montana call attention to the fact that the dandelion will crowd out alfalfa.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY
MITCHELL BROS. COMPANY
 (INCORPORATED.)

OFFICE:

**Manhattan Building, 315 Dearborn Street,
 CHICAGO, ILL.**

HARLEY B. MITCHELL.....Editor
 A. J. MITCHELL.....Business Manager

Subscription Price, - - - \$1.00 per Year
 English and Foreign Subscription, - 1.60 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., AUGUST 15, 1905.

Official Paper of the Illinois Grain Dealers' Association.

THE OUTLOOK.

Certainly there never was before the grain trade of this country a more satisfactory outlook for business through a crop year than now. From all quarters come reports of the most bountiful crops: Wheat, oats, hay and corn (in prospect); and in spite of the abundance, prices steadily refuse to sag down to the old-time low levels of "bumper-crop" years.

It used to be said that a man could eat "only so much" in any event; but our years of recent prosperity disprove this. A prosperous working people do eat more than a poor people, if not in actual pounds then in more expensive forms. The workingman in his day of plenty eats more white flour, takes his corn in higher priced meats and not as meal, makes more use of the horses that consume hay and oats in town, and so on, not to mention the many new forms of food and other commodities the modern chemist has evolved from the products of the farm.

So prices are not likely to go down again to the buffers; and as farmers are richer than ever before, the flood of cereals to market ought this crop year to take that deliberate and even movement which is the delight of the grain dealer—that is, if the market riggers will give the legitimate trade a chance.

It is, then, up to the country shipper to "make his hay" right through the season. Be reasonable, Mr. Shipper; be fair to your trade; don't abuse it or yourself by stubbornly selling "on track" under all conditions: study your business as carefully as the track bidder does his and yours; look out for expenses; look to the physical condition of your houses, and keep them up. Do all these and more and you'll

make money and at the same time deepen the respect for you that farmers, like other men, have always for the merchant who does business intelligently and "on the square."

SELLING ON TRACK.

To the indictment by E. W. Seeds of the system of selling on track "3 or better," published in these columns in July, the editor is able to add in this issue, on pages 71-72, an even more searching condemnation of the system. While Mr. Seeds cut to the quick in his criticism of the physical and pecuniary effects of the system, Messrs. Pope & Eckhardt Co. go still deeper and uncover its moral tendencies, which are unmistakably bad.

The system is degrading the trade, destroying the country shipper's ambition and taking away all incentive to study his business and its intricacies, and will end by making of him a "hewer of wood and drawer of water," without even the black slave's certainty of a full belly or the employe's reasonable expectation of a wage envelope on pay day.

The track seller's interest, too, in the trade outside of his own office goes as far, perhaps, as his competitor's doorway, with whom he may or may not be on such friendly terms that he will join a local association with him; but his interest in a national association and its work in connection with the great and weighty matters of railway rate reform and the improvement of the details of interstate commerce in grain and all those other great questions that go to the heart of the grain trade of the nation and its expansion or conservation,—with these the habitual track seller has little concern, because eventually he becomes the ideal lazy business man who allows the big fellows who bid him "3 or better" to do all the thinking on those subjects and also to pocket the profits the country shipper might at least get a share of if he did business on a broader plane and with a higher estimation of the opportunities his business holds before him.

THE ELEVATOR ALLOWANCES.

Just what was expected to be accomplished by reopening before the Commerce Commission the question of elevator allowances does not appear, in view of the fact that the Commission, in a decision in the case of the Midland and Omaha Elevator companies, rendered June 25, 1904, and published in these columns in the number for August, 1904, disposed of the question of the legality of the allowances, the Commission then saying:

However objectionable the arrangement in question may appear from any point of view, we are convinced, rather against our original impression, that it cannot be adjudged unlawful.

What was lawful in 1904 cannot be unlawful in 1905, no law making a change having been enacted. The same situation obtains, nevertheless: the allowances are grossly unfair advantages given by the railroad companies to favorite buyers and shippers, lessees of railway elevator properties, for "services" that should as a matter of fact be performed directly by the railways themselves in order to put all

shippers on equality. What would be said of a railway company that would lease its freight depots to certain wholesale grocers or dry goods merchants and pay them "allowances" for loading and unloading their own goods without permitting their competitors to enjoy the same privilege and share in the profits of the transfer?

This is what is done in the grain business; and the meanness of the discrimination is but too apparent, as the profit in the "allowances" is more than sufficient to give the favorites the control of the grain trade of their territory and, whenever they choose to exercise their power, to drive every other competitive terminal buyer out of business.

The testimony taken at St. Louis and Kansas City and elsewhere during the past thirty days, briefed in another place, adds nothing to the force of the objections urged against the system in the testimony taken in 1904 at Chicago, on which the decision of June 25, 1904, was based, but it does show the "infinite variety" of this railway meanness, how burdensome it is becoming to those members of the trade who are trying to do business on a self-sustaining basis, and how rapidly the iniquitous system has spread to all parts of the country, everywhere working injustice to dealers who have no railway pulls.

THE HAY EXHIBITS.

Sample bales of hay showing in concrete form the ideas on grading of a number of shippers and receivers of hay proved an interesting, popular and instructive exhibit during the convention of the National Hay Association last month. The exhibit included sample bales of timothy, clover, clover mixed and prairie hays, cut hay, alfalfa, etc.

The part of the exhibit which brought out the most comment, and was no doubt the most interesting, was made up of bales of timothy and clover mixed hays, each bale containing known percentages of timothy and of clover, a feature urged by E. L. Rogers of Philadelphia. The timothy and clover were mixed in weighed proportions before pressing, and each bale bore a placard stating the exact amount of each kind of hay in the bale. Several bales contained from 50 per cent to 75 per cent of clover, and considerable surprise was manifested that so large an amount of clover could be mixed with the timothy and appear in the bale only as a "light clover mixed." Several reasons were advanced, however, for this, viz., the mixtures were impossible from a practical point of view, as the clover was cut July 10 and the timothy July 13, from a different field, whereas in practice the grasses naturally would be cut simultaneously as they happen to grow together, hence it would be impossible to measure the proportion of each. Further, if the timothy and clover were cut at the same time and cured for the same length of time, the clover would appear much darker than was the case in the samples on exhibition. Of course, in grading hay at the terminal markets no attempt is made to figure out the exact weight of clover in a given bale, the grading being based entirely on its appearance.

The exhibit, taken as a whole, was valuable, and there was no question but that it should be made a feature of succeeding conventions. A great improvement was shown over the exhibit at St. Louis, and by the natural process of development it is anticipated the exhibits from year to year will tend to elevate the hay trade and eliminate a considerable amount of the annoyance and dispute occasioned frequently over a difference or misunderstanding as to "grades."

A suggestion which has much merit and which the directors of the National Hay Association might feel warranted in considering when arranging for the exhibit at Put-in-Bay Island next year, was evolved along the following lines in a discussion after the convention had adjourned, viz.: Each bale of hay exhibited should be numbered, but should have no other mark by which to identify it. There should be no statement as to the amount of timothy or clover contained in the various bales, nor should there be any card or mark of identification as to the probable grade or shipper. The state or section of the country in which the hay was grown, however, might be shown. Then there should be an inspection of the bales on exhibition by several inspectors, who would designate the bales by the number and refer their individual findings to a committee, who in turn would determine the grades and mark each bale accordingly. It would be a course of study of great value if the delegates would observe the different bales before the official inspection and make note of their own impressions. After the official finding and grading, let the delegates compare their views with the final grading and study out the reasons for any differences which may appear. The "grading" committee should go into detail in making its report, and, where occasion seems to require it, give the reasons for designating a certain bale No. 2 or No. 3 or clover mixed.

SUPERIOR INSPECTION FIGHT.

Unfortunately the success of the newly established department of grain inspection at Superior under Wisconsin law does not depend upon the good faith of the Wisconsin Grain Commission. That body has created a system and established grading rules that are remarkably fair; and having sedulously put behind them any temptations to manipulate the rules to benefit the Superior market by lowering standards illegitimately, the Commission will assuredly endeavor to carry on an inspection fair alike to country shipper and the Eastern and foreign consumer. But Superior's money is not moving grain to Superior and putting it through Superior elevators. That work is done by Minnesota men who have their headquarters at Duluth, where all their commercial interests are centered and where their friends, the managers of Superior railroads, are also located. And so when the owners and lessees of Superior elevators took them out of the "regular" list, the Superior Board of Trade could not prevent it and now faces the alternative of providing operating public elevators or of going out of business as a grain exchange, unless

shippers to Superior shall demand the Wisconsin inspection. It is now understood the lessees of the Great Northern houses are under agreement to handle all Wisconsin inspected grain offered; in which case shippers friendly to Wisconsin inspection may force the elevators back into the "regular" list and thus save the new inspection.

The Wisconsin Grain Commission has done its work well and is entitled to praise for making an effort to establish an inspection that will be more fair than Eastern buyers are willing to concede is the Minnesota inspection; but though their acts have been widely advertised they cannot invade private elevators or build public ones. Only Superior men can do that; and unless they do provide public elevators in some way the much discussed Wisconsin inspection will fail now as it did a few years ago, because there will be nothing for it to inspect.

BUREAU OF CO-OPERATION.

The departure that in the last half century public opinion has made from the old laissez-faire doctrine of the fathers is fairly estimable by the farmers' demand at Bloomington last spring for a new bureau in the Department of Agriculture to be called the Division of Co-operation—one to foster one type of corporations, while in the Department of Commerce and Labor would sit the chief of a bureau to curb other corporate bodies of the same type.

It is not a government bureau that is needed to help such concerns as the farmers' company at Neilsville, Minn., then recently sold out under a judgment owned by the company's commission house; or that at Tuscola, Ill., against which local bankers had obtained a judgment to recover \$15,000 due on a note a year old; nor yet that at Bushton, Ill., which shipped to bogus receivers who stole their grain; nor that at Owatonna, Minn., which had to levy an assessment of 50 per cent on its shareholders to keep the company going for the time being.

The postulate once unexpressed, however believed in by the few, that "every evil in a society admits of cure and that cure lies within the reach of the law," has come to be a form of thought which is rapidly destroying the old American doctrine of reliance on self and replacing it with superstitions that the individual must be protected from the results of his own blundering selfishness by government help or legislative enactment.

FEDERATION VS. ASSOCIATION.

The editor cheerfully gives space to the communication of W. H. Chambers, on page 82, with the explanation that the editorial complained of by Mr. Chambers was intended to express the idea Mr. Chambers desired to convey, to wit, that in case the Grain Dealers' National Association should fail to recover itself a northwestern federation of state associations might be desirable. To this idea there can be no possible objection; rather, there is much to commend it.

But the National Association is now waiting only for the support of the very associations

which would compose the federation Mr. Chambers had in mind to insure its complete rehabilitation. It has so far recovered itself during the past 60 to 70 days that it is able to employ a competent man at a respectable salary to take charge of its affairs. It has the hearty support of receivers everywhere. So it is up to the shippers, members of the state associations, to broaden out enough to see that they can afford to contribute \$1 per annum each to the support of the National Association.

POOLING WHEAT IN KENTUCKY.

Pooling wheat is a common practice by farmers on the Pacific Coast, where pools not infrequently exceed 100,000 bushels; but it seems to be a new proposition in the Mississippi Valley, where individualism has been a peculiar characteristic of the farmer. The pool is not, however, objectionable per se, since on the Coast it facilitates trades and usually results in a slightly better price to the members of the pool when it is sold as a single lot. In Daviess County, Kentucky, however, the object of pooling is not to obtain a better price by putting a large single lot within the reach of the buyer, but to test the fallacy of the American Society of Equity that a price can be forced by a handful of farmers "holding their wheat." So, as the local lodges of the Society decided to hold for \$1, the members of the pool will hold their grain in their own barns, so far as they are able, or haul it to a storage center in each precinct, or in Owensboro, the whole to be sold to the first man who bids \$1 for all of it. It is said the farmers thereabouts made money by holding tobacco, and now they propose to hold for \$1 wheat. It will be interesting to watch their grip in operation.

IT DEPENDS.

Mr. Goemann of Toledo, at the late National Hay Association meeting, expressed the belief that "all national organizations should be made up of direct, not affiliated, members, through a state organization, for the reason that the income is more certain;" and, secondly, "the entire membership can actively participate in its affairs." Mr. Goemann was talking to an association very successfully conducted on that basis; but the Millers' National Federation is an equally successful example of organization on the affiliation principle, and that, too, after the Millers' National Association, on the direct membership plan, had signally failed to keep up an interest in association work beyond a certain time. So it all depends. If an association can make itself useful enough to the trade as a whole to retain the interest of individuals, it will be able to maintain its membership and resources by either plan; or, failing to sustain the interest of individuals, it will meet with failure by either plan. It is not the form but the work of the association that must be depended on to keep any voluntary organization alive and in working condition; and the more widespread the interests to be conserved, as in the grain trade, the more widespread must be its membership.

EDITORIAL MENTION

If you have not cleaned up and made your repairs, do it now, and be ready for the new grain when it is ready for you.

The Morrow Commission Co.'s letter in this month's Hay Department contains some timely practical suggestions that hay shippers will do well to ponder.

Durum wheat has been rather popular in the Northwest the last year, and this on account of its yield; but the growing size of the discount is not encouraging.

The black-ruster has joined all the rest who a month ago were yelling, "Look out—it couldn't be worse," and is nursing the same kind of a tired feeling he then gave the public.

Does the Ohio firm that recently bought 6,000 grain sacks to loan to farmers employ a special bookkeeper to keep tab on them, or is the invoice charged to profit and loss at once and be done with it?

The Omaha Bee, which is managing Mr. Worrall's publicity campaign, apparently, has already "dissolved" the Nebraska Grain Dealers' Association. No one else seems to have heard of the dissolution, however.

The board of directors of the Cincinnati Chamber of Commerce has ruled that a public weigher may not issue official certificates of weight for grain weighed upon an automatic scale used in one of the local elevators.

A thirteen-year-old boy was caught in the belt of a shaft from a gasoline engine at a Bement elevator, and beaten into a lifeless, shapeless mass, a few days ago. What business had a thirteen-year-old boy in the engine room?

Before shippers decide conclusively that the commission man is a business parasite that should be eliminated, they would do well to ponder the thoughts suggested in the article on page 80 of this issue on "Relations of Commission Man and Shipper."

A sub-committee on plan of campaign of the Interstate Commerce Law Convention met at Chicago on August 14 to perfect a program and arrangements for a convention to be held in October to start the work this year to have new railroad legislation passed by Congress.

The Boston Chamber of Commerce has not accepted as final the recent decision of the Commerce Commission on the Atlantic ports' differentials, which its committee says, "create an artificial division of the export traffic between the different ports by strangling competition, and deliberately invite and encourage

rate-cutting." The Chamber says: "We therefore shall not cease to demand their abolition."

At Aurora, Ill., on July 11, a beer refrigerator collided with a loaded wheat car, and both wheat and beer were spilled out on the ground. Somebody's shortage may thus be accounted for; but the brewer had, no doubt, easier sailing in the claim office than the grain shipper.

Indiana millers and grain dealers are generally getting together to give the millers a fair show to get enough local wheat before the surplus is shipped. This will give farmers all the grain is worth, and enable the handlers also to make the profit their services are entitled to have.

The Ohio Shippers' Association has again concluded a bargain with the Ohio railroads that is eminently fair to both. It is published in another column, as a sample of what a conciliatory but firm policy, based on essential fairness and reciprocal benefits, can do in the way of adjusting relations between shippers and carriers.

The Nebraska organ of the farmers' elevators says: "Co-operative companies should be willing to buy on a reasonable margin. Competitors that shove the price up beyond a reasonable margin should be shunned as much as a man shuns a viper." What's that? Co-operatives unite to keep prices down? Well, what next?

When the C. G. W. R. R. put on its tariff sheet the public announcement that it would make an "elevator allowance" of $1\frac{1}{4}$ cents for loading grain at Kansas City and $1\frac{1}{4}$ cents for unloading it at Chicago, it "shocked" the respectable roads that have been making the allowances just the same, but have not been frank enough to admit it.

The Cincinnati Chamber of Commerce have been at work for some weeks, through a committee composed of B. W. Gale and H. H. Hill, grain men, and O. G. Fetter, a railroad man, in working out the details of a reform of the local weighing system and means for putting an end to the vexatious pilfering from grain cars while in the yards.

One cannot quite understand why members of the Chicago Board of Trade continue to petition the directory to authorize trading in puts and calls, when these are penalized by Illinois statutes. If the petitioners can't really go on living without that kind of business why not move to Beerville, where they are not illegal, and play the game straight?

The new anti-trust law in Minnesota is said to be the cause of the dissolution of the Red River Millers' Club, a trade organization with a history covering many years. Not that its aims and purposes were admitted to be illegitimate, but perhaps from a technical point of view the club may have been an illegal body. It is a great pity that anti-trust lawmakers habitually ignore the business necessity and public value of reputable trade associations.

Some day, perhaps, the public will appreciate how much is lost to all concerned by this radical kind of legislation, which is too often based on personal or class malice and misinformation.

The Omaha Grain Exchange is young and chesty; yet it has so far failed to stop by protest the construction of a cut-off line from Ashland to Sioux City by "Jim" Hill, who seems to expect he can haul grain through Nebraska to head of the lakes and leave Omaha out of it.

It was loudly rumored about Chicago a fortnight ago that Governor Deneen expected to make a rattle in the Chicago grain office; but thus far Cashier E. P. Fassett is the only man who was dropped out of the window. "We are simply cutting down expenses" (\$2,200), said Chief Inspector Cowen. Coincidentally it is hinted that Mr. Fassett's ward has behaved badly.

Grain dealers all over the country, who know L. Cortelyou of Mascoutah, for many years president of the Kansas Association and one of the vice-presidents of the National Association, will regret to learn of the death of his son, Steele Cortelyou, who died of yellow fever at Panama. Steele Cortelyou was a stenographer in the employ of the government, and becomes one of the first of what must be a long line of heroes to give their lives for the Panama Canal.

The new German tariff, abrogating the present tariff agreement with the United States, will go into effect on March 1 next. Unless in the meantime a reciprocity agreement is concluded with the United States, so as to give us the benefit of treaty or "conventional rates," the rates on American grain will be 31 cents per bushel on corn, 42 cents on rye, 49 cents on wheat and \$4 per barrel on wheat flour, the "conventional rates," or those to be obtained by a reciprocity treaty with the empire, being respectively, 19 cents, 30 cents, 36 cents and \$2.17. Perhaps these figures might suggest a reason why grain dealers have an interest in the reciprocity convention to be held in Chicago on August 16 and 17.

Is the death knell of low-grade hay for general distribution being sounded? If it is—and there is much evidence to lead one to think so—it behooves the regular shipper to be careful in buying hay from the farmer and to be a little more discriminative in favor of the better grades. Discussion on this point has been going on in one form and another for years and it is beginning to bear fruit. Consumers in the large cities especially are more discriminative and are insisting more and more on better grades. It will not do for shippers to disregard the call. Let them take it up and carry it on to the producer and insist on better goods to supply their demand. Pay for the off grades only what the goods are worth, and in a season or two the grower will take notice that he must be careful in making and caring for his hay. When the producer begins to think about it and sees it is really money in

his own pocket to do better on his hay crop the large consumers in the big cities will get more nearly the kind of goods they want and are willing to pay for, and the commission man will not have so much trouble with both his shippers and his buyers.

Cash corn at a figure more than twice that of new white oats was a condition on the Chicago Board August 12, when corn sold at 56 cents and oats at 25½ cents. Local dealers say this is the first time in twenty years that corn and oats have shown such a wide difference in price, except for a few times where corners have been the primal cause.

The publication of the monthly crop estimate at noon of the 10th instead of after the close of business for the day was somewhat confusing and necessitated some lightning calculation by the volume estimators, but the trade is not yet ready either to approve or condemn the change of hour of publication. St. Louis was ready with a protest against it ten days before it was possible to know how the change would operate; but the other exchanges seem to be willing to try it a while before crying out about their hurts.

At last the Kansas City Board of Trade has "seen a light"; and on August 3, by an almost unanimous vote, amended its rules to make members liable to expulsion who shall have any business relations with the local bucket-shop calling itself the National Board of Trade. Perhaps this action may have other moral influences besides restraining Board of Trade members from tarring their own business with the taint of common gambling and help to create a public sentiment in that city that will result in an attack on the so-called National Board (sic) by the local police as the common nuisance which legally it is.

The Nebraska farmers assume that because prices for grain seldom or never vary at the different elevators in a given town, therefore, "the business is pooled." By the same criterion, then, it may be said that the business of the grocers is pooled, for sugar and Uneeda biscuit prices probably do not vary a fraction of a cent in a month, unless someone on occasion takes a notion to donate his profit on sugar and crackers to the buyer. All elevator men in a given town and in all towns where freights are identical must necessarily pay the same prices for grain, for obvious reasons, as the country buyer cannot make the price; and every rational farmer understands that. It is only when someone like Tom Worrall, who has talked that doctrine for years because he knows it is true, gets a sour stomach about some local affair and begins to talk through his Panama and to rip his neighbors and friends up the back, that a different story is told. Why is Mr. Worrall trying to dump his garbage at his neighbors' front doorsteps? Why not go after the track buyers, who send out daily bids to Nebraska dealers, which seldom vary more than 1/8 cent down the whole list? Why is it that they can manage to keep so well in line? And why is their being so

closely in line so much less objectionable to Mr. Worrall than the country dealers' apparent unanimity? It is not the Nebraska Association that makes the prices, but the daily operations of buyers and sellers on the grain exchanges of the world. Mr. Worrall is simply running amuck.

C. A. Nellis, a contractor, has asked the President to order an investigation of the free seed distribution by the Agricultural Department. Mr. Nellis is not wholly disinterested. He had a contract with the Department to purchase and deliver seeds, and it is alleged that owing to a scarcity he was authorized to and did substitute in many instances cheaper seeds, but \$68,000 of his claim was disallowed. This is his kick. One can't just see how he was wronged if the amount disallowed was proportionate to the character of the seeds he furnished. But no one will object to an investigation, which, let us hope, his Excellency will order. A little daylight on the free seed graft would do no damage—at least to the public.

The jail sentence of E. J. Smiley expired on August 1, and that gentleman is now enjoying his pristine freedom at his home in Topeka, the majesty of Kansas law having been "vindicated." One could, indeed, wish, as the sententious New York Evening Post says—that the first victim of the people's righteous wrath might have had a more conspicuous career as an oppressor. We doubt, in fact, if the name of E. J. Smiley has anywhere been a household word. But even the smallest bun is better than no bread, and the taunt that no trust promoter is ever deprived of liberty has in Kansas lost its sting of truth.

But Mr. Smiley was not a trust promoter and the taunt has yet to "lose its sting." But let that pass. Mr. Smiley has done more than his duty to his people, and no doubt they appreciate it; and among them, let it be hoped, are the four men of La Crosse, whose sins as scapegoat Mr. Smiley has unloaded and left behind him in Bison County's jail.

The hay shippers of the country have been peculiarly the sufferers from an arbitrary increase of freight rates, as in the hay classification matter. They have, besides, taken that matter before the Commerce Commission and established to the satisfaction of that body that the increase of rate caused by the higher classification was unjust and unwarranted. But the courts, on the railways' appeal, dismissed the hay men's suit with the ruling that as the Commerce Commission has no power whatever over rates, its findings and orders in that matter, whatever their nature, are of little consequence and of no legal force or effect. And so hay shippers continue to pay the increase, amounting to 50 to 60 million dollars a year. It was with peculiar interest therefore that the National and Michigan Hay Associations listened to addresses before their conventions by Hon. Chas. E. Townsend of Michigan on the railway rate problem and the fundamental principles of the Esch-Townsend bill, of which he was joint author. "The welfare of the railroads and the welfare of the people of this country depends on an early and a fair and just settlement of the rate problem," he said.

"The law calls for a fair and just rate to all, and that is the only settlement upon which the people will make an agreement." He refused to concede that his utterances on this question are "anarchistic." The railways, having enjoyed the special privilege of exercising the governmental function of eminent domain and rich gifts of vast quantities of the public's landed estates, he holds that they are more beholden to the public than are mere individuals; and, further, recent experience at least has shown that, "The only sure way the railroads and other big public service corporations will be made to live up to their contracts is through the courts and before an honest and efficient tribunal." Mr. Townsend's remarks at both conventions met with an enthusiastic response.

A knowing Cleveland traffic man has given away another secret route to the payment of the rebate the Elkins law forbids, that is different from the "allowances," "shrinkage" and "brokerage" grafts. Asked how the railroads could get around the Elkins bill and still give rebates to the preferred shippers, he smiled in a knowing sort of way and said:

Oh, that is easy enough. Suppose you had two shippers of ore out of your town of Cleveland. One had 2,000,000 tons to be moved, and the other 500,000 tons. The big fellow naturally wants an advantage, since he has so much to move. You also want his business for the same reason. The railroads have a demurrage clause in all of their bills of lading, and a shipper can claim that his goods have been delayed, and get the demurrage. At the same time, it is the privilege of the railroad to refuse to pay a demurrage claim and let the man sue if he has a legitimate claim.

See how it is done?

Taking into consideration the fact that the publication bears the press imprint of a Chicago grain dealers' journal, as well as the name of Secretary Wells as compiler and publisher, it is with not a little surprise that one notes in the last edition of the "Official Directory of the Regular Grain Dealers of Iowa" the advertisement of an elevator concern located in the extreme northwest corner of Indiana, which solicits the business of regular dealers, claiming to be a member of the Indiana, Illinois and Grain Dealers' National Associations, when, as a matter of fact, it is not a member of either. The concern is the derelict of "Sid" McHie's various bucket-shop adventures during the days when he was fighting the Chicago Board of Trade for quotations, and who hitherto has been and is now in an exactly similar position to Christie of Kansas City, who, as Mr. Wells informs his people, is—

soliciting applications for membership in the National Board of Trade, also of stock in the National Grain and Elevator Co. Mr. Christie has been a leading bucket-shop operator for several years and is not recognized by the legitimate grain exchanges of the country. The Supreme Court of the United States recently enjoined him from using quotations of Chicago Board of Trade.

Of course, "accidents will happen," as in this case; but in the next edition of the list it is hoped Mr. Wells will not shock one out of another year's growth by springing on readers of the Directory the "ads" of L— H—, C— & Co., and the rest of the wind-jammers!

TRADE NOTES

A. T. Ferrell & Co., Saginaw, Mich., have recently added to their line by the purchase of the Giant Picker and the Oxford Polisher.

The employes of the Webster Manufacturing Co., Chicago, held their thirteenth annual picnic at Thornton Park, Thornton, Ill., on August 12.

The B. S. Constant Co. of Bloomington, Ill., has been enjoying a nice trade on the United States Corn Sheller and B. S. C. Chain Feeder and Conveyor. The company expects a large demand for both these specialties this fall.

The Bowlus Automatic Scale Co., Springfield, Ohio, have embodied in a circular advertising their weighing machine the editorial on "Defects in Scales," which appeared in the "American Elevator and Grain Trade" for June 15, 1905.

A branch salesroom has been opened at 311 Main St., Cincinnati, Ohio, by the Foos Gas Engine Co. of Springfield, Ohio. A full line of engines is carried in stock and the branch is under the management of Weagley & Brown.

The Maroa Manufacturing Co. of Maroa, Ill., will soon put on the market a new grain dump and elevator, the manufacture of which was commenced last spring. Twenty-five of the machines are being made this season as an experiment and next year the shops will likely be enlarged and the manufacture of the machines undertaken on a large scale.

The Jeffrey Manufacturing Co., Columbus, Ohio, has recently issued a supplement to Screen Catalogue No. 69, showing many types of screens for various purposes. The company will send any of its catalogues free on request. The one devoted to elevating and conveying machinery is especially comprehensive and should be in the hands of every grain dealer.

The Boynton Scale Co. of Toledo, Iowa, has an interesting 32-page catalogue showing the line the company manufactures. The company has been making scales for over 20 years and has developed a strong line of wagon, platform and other scales. The Boynton Pitless Scales are particularly strong and this is one of the lines featured by the company. Its line of track, hopper and platform scales is well known and has been favorably received by the trade. The company sends out all scales under a strong guarantee on 30 days' trial.

The Keewatin Flour Mills Co., Ltd., of Ottawa, Ont., has contracted with the Macdonald Engineering Co. of Chicago for the erection at Keewatin, Ont., of a large fireproof mill and elevator to cost about \$750,000. Both buildings will be of steel and concrete construction, the mill having a capacity of 5,000 barrels daily and the elevator a storage capacity of 500,000 bushels. Work will commence at once on the buildings, and they will be completed early next year. The work will include the development of 2,000 horsepower on the water privilege owned by the company at Keewatin, to run the plants.

The following contracts have recently been awarded to the Younglove & Boggess Co. of Mason City, Iowa: D. Rothschild Grain Co., Davenport, Iowa, 12,000-bushel elevator, Blue Grass, Iowa, 12,000-bushel elevator, Mount Joy, Iowa; Anchor Grain Co., Minneapolis, Minn., 15,000-bushel elevator, Alta Vista, Iowa, 15,000-bushel elevator, Hubbard, Neb.; Plymouth Elevator Company, Sioux Falls, S. D., 20,000-bushel elevator, Medford, N. D.; Terwilliger & Dwight, Sioux City, Iowa, 20,000-bushel elevator, Chester, S. D.; Akron Milling Co., Akron, Iowa, repairing elevator at Dakota City, Neb.; Benson Grain Co., Heron Lake, Minn., 20,000-bushel elevator, Wakefield, Neb.; J. F. Twamley Son & Co., Omaha, Neb., 15,000-bushel elevator, Readlyn, Iowa; National Farmers' Exchange, Chicago, Ill., 15,000-

bushel elevator, Kilbourne, Ill., 12,000-bushel elevator, Long Branch, Ill.; Farmers' Elevator Co., Wannamingo, Minn., 30,000-bushel elevator, Wannamingo, Minn.

One of the most complete catalogues of grain cleaners, flour and bran packers and special machinery ever issued is being distributed by the S. Howes Co. of Silver Creek, N. Y. The book contains 143 pages and illustrates the complete line of the well-known "Eureka" cleaners and other specialties. The descriptions of the various machines are very complete, inasmuch as weights, dimensions, etc., are given in addition to a full explanation of the construction and operation of each machine. The "Eureka" machines are so well and favorably known to the trade that little can be said about them that is not already known, but at the same time this catalogue should be in the hands of all elevator owners who are interested in grain-cleaning machinery. It is sent free of charge to those who will write for a copy.

An industrial bureau has been established by the Chicago & Northwestern Railway, the purpose of which shall be to furnish reliable information regarding the many desirable locations along the Northwestern line for new manufacturing enterprises. The rapidly growing cities and the splendid resources of the territory reached by the Northwestern line combine many of the essentials to industrial success. Fine water power locations that may be supplemented by electrical energy developed therefrom, vast forest of hard and soft timber for all kinds of woodworking concerns, mineral wealth that provides the material for foundry and machine work, coal fields close at hand, and an excellent supply of a good class of labor are all found here. This feature should prove of much benefit not only to the railway company, but also to the communities along the line, and such of them as have commercial organizations will find ready co-operation by this department. It will also prove a time-saving convenience to manufacturers seeking new locations or desiring to establish branch establishments, to whom information will be promptly furnished upon application.

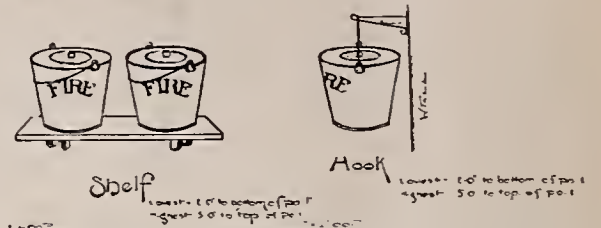
When completed, the New York City Milling Co. will have a model plant in their new 2,000-barrel mill now building in New York City. This mill will rank among the largest in the East and its equipment consists of machinery selected after a most careful investigation with a view of installing only such machines as are capable of producing the best results and which have established a reputation for durability and efficiency. Special attention was given to the selection of the grain cleaning machinery, comprising, as it does, a very important department in the equipment of the modern mill, and especially one of large capacity. The S. Howes Co. of Silver Creek, N. Y., are to be congratulated upon receiving the contract for their well-known line of "Eureka" Cleaners for this new mill. "Eureka" Grain Cleaners will be used exclusively, consisting of the company's latest improved type of counterbalanced two-shoe receiving separators, counterbalanced dustless milling separators, double scourers and single scourers. In addition to this complete and unbroken line of grain cleaners, the S. Howes Co. were also favored with the order for all of the flour, bran and feed packers required for this mill. They are to supply their well-known Iron King Friction-Driven Packers for bran and feed and their Standard Silver Creek Packers for flour. The output of the "Eureka" shops has for many years been known for its high standard of excellence, and in the selection of this machinery the New York City Milling Co. decided in favor of the machines manufactured by the S. Howes Co. solely upon their merits.

Southern South Dakota farmers are gradually working out of wheat into corn, oats and pasture.

VALUE OF FIRE PAILS.

Insurance interests recognize the value of the fire pail, but they also realize that fire pails are useful only when properly filled and maintained in condition to be ready for instant use should occasion require.

Where reduced rates of insurance are granted because of the equipment with fire pails the insur-



ance organization generally sees that this equipment is kept in working order by requiring that certain rules governing it are lived up to.

The regulations of the New York Fire Insurance Exchange, which are typical of those of similar organizations, provide for the maintenance of two pails for an area of 1,000 square feet of floor space, or less, and one pail for each additional 500 square feet. These pails must be of galvanized iron, with a capacity of 10 to 12 quarts, and painted red. They must be marked "Fire," or "For Fire Only," letters to be black, not less than 2½ inches high. In establishments where employes are liable to use the pails for ordinary purposes round bottoms are recommended. Covers are not required but are recommended.

The pails may be located on shelves, brackets or benches, but these must be intended for, and limited in their use to, fire pails. The distance from the floor to the bottom of the pail should not be less than two feet nor more than five feet to the top of the pail. When round-bottomed pails are set in shelves or benches, the holes cut for the oval bottom should be only large enough to receive the oval; in other words, the flange of the bottom should rest on the wood and not be set into the opening.

At extra-hazardous points additional pails should be placed and all pails must be refilled once a week regularly with clean water. When fire pails are located where there is a liability of the water being frozen in cold weather, it is recommended that two pounds of chloride of calcium or salt (the chloride of calcium is preferable) be placed in each pail. For casks the quantity recommended is 50



pounds for each cask. It is necessary that the chloride of calcium or the salt be dissolved by thorough stirring.

Casks of water are accepted, each cask as the equivalent of six fire pails, provided with the following conditions: (a) Cask to be a good oak barrel. Capacity to be not less than 50 gallons. To be painted red, with word "Fire" or "For Fire Only" in black letters not less than six inches high. To have a cover with a handle. (b) Three standard fire pails to be placed on a shelf or hooks alongside of the cask.

By adopting these regulations and enforcing them owners can be assured that their fire pails will be ready for use whenever needed.

The Atlanta grain dealers have organized an association.

Galveston handled no wheat during July of this year, although ordinarily the exports during July and August are the heaviest for the year.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of July, 1905:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,043,113	1,102,291		
Corn, bushels.....	390,036	199,188	60,000	88,004
Oats, bushels.....	336,340	156,886	27,814	205,142
Barley, bushels.....		1,286	480	414
Rye, bushels.....	4,073	3,754		
Timothy Seed, lbs.....	1,343			
Clover Seed, lbs.....	500	2,144		
Hay, tons.....	2,504	2,917	1,419	1,120
Flour, bbls.....	83,923	113,891	33,141	37,246

BOSTON—Reported by Daniel D. Morss, acting secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Flour, bbls.....	92,726	110,103	24,356	50,839
Wheat, bushels.....		287,736	91,838	181,735
Corn, bushels.....	481,266	701,018	309,145	430,155
Oats, bushels.....	275,597	360,950	3,740	1,363
Rye, bushels.....		800		
Barley, bushels.....	18,945	729	18,973	8,647
Flaxseed, bushels.....				
Mill Feed, tons.....	988	879	165	48
Cornmeal, bbls.....	2,402	1,711	528	1,615
Oatmeal, bbls.....	12,898	3,101	6,155	3,766
Oatmeal, sacks.....	2,232	1,645	505	2,960
Hay, tons.....	13,780	12,900	1,632	2,430

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,493,155	2,157,336	209,850	
Corn, bushels.....	5,121,549	4,149,032	50,637	
Oats, bushels.....	3,236,120	1,565,333	674,906	
Barley, bushels.....	233,650	187,000	132,431	
Rye, bushels.....		143,000		
Timothy Seed, lbs.....				
Clover Seed, lbs.....				
Other Grass Seed, lbs.....				
Flax Seed, bushels.....				
Broom Corn, lbs.....				
Hay, tons.....				
Flour, bbls.....	867,665	609,939		

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	2,909,748	986,560	793,706	835,363
Corn, bushels.....	10,330,750	6,875,657	8,710,561	7,288,873
Oats, bushels.....	6,288,026	4,380,262	4,456,192	3,283,130
Barley, bushels.....	791,662	544,238	129,422	118,216
Rye, bushels.....	89,000	95,926	18,764	21,080
Timothy Seed, lbs.....	462,500	413,160	105,431	328,797
Clover Seed, lbs.....	45,040	236,220	18,946	106,560
Other Grass Seed, lbs.....	509,850	233,542	546,726	1,224,094
Flax Seed, bushels.....	117,020	165,840	8,421	32,200
Broom Corn, lbs.....	406,255	827,700	307,850	1,093,370
Hay, tons.....	16,683	15,376	1,081	853
Flour, bbls.....	463,144	599,638	410,454	468,683

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	549,993	156,567	233,824	67,720
Corn, bushels.....	497,046	435,466	380,015	411,684
Oats, bushels.....	526,753	243,454	257,383	107,550
Barley, bushels.....	8,000	11,000	14	10,058
Rye, bushels.....	26,113	21,189	524	1,163
Timothy Seed, bags.....		36	229	445
Clover Seed, bags.....	466	86	172	164
Other Grass Seed, bags.....	3,094	1,337	5,190	3,772
Flax Seed, bushels.....				
Broom Corn, lbs.....				
Hay, tons.....	4,738	5,058	4,553	2,792
Flour, bbls.....	84,525	79,586	47,611	49,330

CLEVELAND—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	92,407	18,953	34,921	18,348
Corn, bushels.....	488,785	304,297	447,918	304,870
Oats, bushels.....	871,150	413,610	348,018	130,941
Barley, bushels.....	1,500			600
Rye, bu, and other cereals	3,237			
Flaxseed, bushels.....				
Hay, tons.....	3,038	3,530	593	996
Flour, bbls.....	3,849	5,198	2,166	2,372

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	189,581	117,052	16,364	2,203
Corn, bushels.....	310,369	221,409	113,291	40,432
Oats, bushels.....	136,828	307,005		
Barley, bushels.....	997	1,660		
Rye, bushels.....		3,701	997	
Flour, bbls.....	23,800	29,400	7,500	11,200

DULUTH—Reported by H. B. Moore, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	353,218	1,180,162	783,289	1,197,463
Corn, bushels.....	9,699			3,965
Oats, bushels.....	401,231	237,361	443,776	307,361
Barley, bushels.....	333,577	100,603	191,766	97,527
Rye, bushels.....	3,538	27,258	19,903	27,573
Flax Seed, bushels.....	81,075	600,033	504,771	607,159
Flour, bbls.....	571,325	445,075	553,725	519,645

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	6,563,000	2,364,300	3,736,000	1,069,200
Corn, bushels.....	1,288,000	553,500	867,000	457,200
Oats, bushels.....	580,500	147,600	283,500	51,600
Barley, bushels.....	18,000	12,000	3,000	4,000
Rye, bushels.....	13,000	7,200	3,000	2,400
Flax, tons.....				
Flax Seed, bushels.....	800	2,400		2,400
Hay, tons.....	11,130	7,260	1,960	1,940
Flour, bbls.....			123,800	53,400

MILWAUKEE—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	371,360	235,840	63,780	76,165
Corn, bushels.....	108,300	33,250	94,766	85,250
Oats, bushels.....	490,100	431,600	333,730	619,424
Barley, bushels.....	369,550	264,100	185,900	230,700
Rye, bushels.....	31,200	43,200	11,000	39,280
Timothy Seed, lbs.....	18,325	174,410	136,000	344,815
Clover Seed, lbs.....	35,280			65,990
Flax Seed, bushels.....	1,080	11,700		
Hay, tons.....	1,679	1,669	132	45
Flour, bbls.....	189,700	164,150	293,410	262,036
Feed, tons.....				

GALVESTON—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....				16,000
Corn, bushels.....				
Rye, bushels.....				

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,285,141	1,777,294	605,285	1,484,441
Corn, bushels.....	1,126,432	503,794	878,657	467,585
Oats, bushels.....	205,797	349,223	159,643	283,341
Barley, bushels.....	57,702	36,157	53,890	58,484
Rye, bushels.....				
Flaxseed, bushels.....	1,200			
Flour, barrels.....	166,744	118,470	123,399	205,365

NEW ORLEANS—Reported by Fred Muller, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	3,000		3,000	
Corn, bushels.....	110,020	80,800	82,196	26,416
Oats, bushels.....	156,000	169,000	11,915	
Clean rice pockets.....	1,959,700		7,271,000	
Hay, cars.....	119		hales, 1,153	
Flour, bbls.....	24,785	29,722	21,683	77,901

PEORIA—Reported by R. C. Grier, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	75,200	73,600	123,100	22,400
Corn, bushels.....	997,000	641,200	566,000	368,200
Oats, bushels.....	1,066,000	537,600	1,126,400	633,800
Barley, bushels.....	34,200	59,400	27,000	22,500
Rye, bushels.....	10,400	5,600	3,200	1,600
Mill Feed, tons.....	405	285	2,800	3,039
Spirits and Liquors, bbls.....	10,084	6,502	39,578	32,439
Syrups and Glucose, bbls.....	6,900	6,400	3,790	9,240
Seeds, lbs.....	30,000			
Broom Corn, lbs.....	15,000	45,000		30,000
Hay, tons.....	740	1,260	70	110
Flour, bbls.....	52,000	38,250	48,220	104,450

PHILADELPHIA—Reported by Charles F. Saunders, secretary of the Commercial Exchange.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	452,216	297,949		
Corn, bushels.....	273,224	632,302	175,711	317,142
Oats, bushels.....	308,979	388,020		
Barley, bushels.....	10,400	8,000		
Rye, bushels.....	1,600			
Timothy Seed, bags.....		250		
Clover Seed, bags.....	91			
Flax Seed, bushels.....	23,200	40,000		
Hay, tons.....	5,280	5,610		
Flour, bbls.....	98,760	148,883	38,348	66,185

ST. LOUIS—Reported by Geo. H. Morgan, secretary of the Merchants' Exchange.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	3,958,650	1,853,100	2,423,785	936,140
" sacks.....	186,384	151,833	1,784	1,300
Corn, bushels.....	1,350,000	503,100	1,148,040	676,855
" sacks.....	1,614		21,090	7,745
Oats, bushels.....	1,621,350	977,400	904,660	620,380
" sacks.....	2,527	800	19,940	8,645
Barley, bushels.....	2,500	28,000		18,935
" sacks.....	69			1,705
Rye, bushels.....	18,000	11,700	3,800	10,330
" sacks.....	104	40	400	10
Grass Seed, sacks.....				
Flax Seed, bushels.....				
Mill Feed, tons.....				
Hay, tons.....	11,458	12,485	3,810	5,553
Flour, bbls.....	174,755	83,585	228,755	152,225

TOLEDO—Reported by A. Gassaway, secretary of the Produce Exchange.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	942,000	297,500	403,120	160,850
Corn, bushels.....	435,150	308,500	461,000	349,550
Oats, bushels.....	683,450	317,400	638,500	407,695
Barley, bushels.....		890		
Rye, bushels.....	16,000	6,700	3,415	6,500
Clover Seed, bags.....				

VISIBLE SUPPLY OF GRAIN.

ELEVATOR AND GRAIN NEWS

ILLINOIS.

Sarter & Sarter have disposed of their grain business at Arcola, Ill.

A 40-foot addition is being built to the Farmers' Elevator at Garfield, Ill.

Oberle Bros. & Co., grain dealers at Raymond, Ill., will dissolve partnership.

The Atlas Grain Co. has its new elevator at Utica, Ill., about ready for operation.

G. C. Harrison has purchased the elevator at Lowder, Ill., formerly owned by Mr. Groff.

J. E. Potter is building an elevator at Douglas, Ill., to replace the one recently destroyed by fire.

The Barnard & Leas Manufacturing Co. of Moline, Ill., has brought two improved Hall Distributors.

E. T. and G. C. Harrison of Waverly, Ill., have purchased H. E. Ensley's grain business at Lowder, Ill.

The Atlas Grain Co. is erecting a new elevator at Grand Ridge, Ill., to replace the one burned last year.

The Shellabarger Elevator Co. of Decatur, Ill., has about completed a 40,000-bushel elevator at Clinton, Ill.

A report from Quincy, Ill., states that Albert Dick has completed a 5,000-bushel grain elevator at Bluff Hall.

The Skillin & Richards Manufacturing Co. of Chicago, Ill., has purchased two improved Hall Non-chokable Boots.

The Younglove & Boggess Co. is equipping the elevator at Long Branch, Ill., with an improved Hall Distributor.

The Shellabarger Elevator at Osprey, Ill., has been rebuilt and enlarged and now has a capacity of about 40,000 bushels.

The firm name of G. P. Bowman, Son & Co., grain dealers at Grayville, Ill., has been changed to G. P. Bowman & Son.

The Western Grain and Elevator Co. of Huron, S. D., capitalized at \$500,000, has been licensed to do business in Illinois with a capital of \$2,500.

Farmers around Edinburg, Ill., have formed a company to build an elevator and warehouse at that place. The concern will be capitalized at \$10,000.

The firm of Summers Bros. of Ambia, Ind., composed of F. F. and E. S. Summers, has purchased the grain and coal business of Drake & Messer at Kappa, Ill.

Charles C. Davis, who owns and operates a number of elevators throughout the central part of this state, has bought the Harty Elevator at Kinsman, Ill.

J. T. Riemke has purchased Edward Malaney's one-half interest in the grain business of Condon & Malaney at Pesotum, Ill., and the style of the firm is now Condon & Riemke.

Kirkpatrick, Lackland & Co. are tearing down their old elevator at Chenoa, Ill., and erecting a new one on the site. The new house will be 80 feet high and have a slate roof.

W. F. Banta has let the contract for rebuilding his elevator at Mortimer, Ill., which burned on July 10, and work is now in progress. The new house will be a duplicate of the old one.

The Rock Island Elevator "B" at Twelfth Street and the Chicago River, this city, has been declared regular by the directors of the Chicago Board of Trade. The house has a capacity of 800,000 bushels and will be operated by the J. Rosenbaum Grain Co.

Moberley & Co. are building an oats granary, 44x88 feet in ground dimensions, at Windsor, Ill. The building will rest on a concrete foundation and have a storage capacity of 60,000 to 65,000 bushels. It will have two bins each 14 feet wide, with 16-foot driveway between.

The Lincoln Grain Co., which operates elevators at Lincoln, Lawndale and Broadwell, Ill., changed hands July 24. J. C. Diffenderfer, who has been managing the business since the death of the late Paul Smith in March, 1902, has sold his interests to F. J. Wright for a consideration of \$20,000. The new owner will have personal charge of the business. He is a native of Knoxville, Ill., and an experienced grain man. He was formerly in the grain trade in Nebraska and later operated an extensive line of elevators on roads running out

of Minneapolis. Mr. Diffenderfer, the retiring manager of the Lincoln Grain Co., will locate in Philadelphia, Pa.

The Farmers' Elevator Co. of Somonauk, Ill., has been granted a charter. The capital is \$12,000 and the incorporators are William George, H. A. Rompf and E. H. Dannewitz.

Ben A. Neal has purchased the interest of his partner, John J. Stephenson, in the grain business at Millersville, Ill., conducted under the style of the Stephenson-Neal Grain Co., and will continue it under his own name. Mr. Stephenson will engage in business at Memphis, Tenn.

The Millington Grain and Supply Co., a new co-operative corporation at Millington, Ill., has purchased the Neola Elevator at that place. Possession was given August 1. The farmers' organization has a capital of \$15,000. Walter Finnie is president; Charles Pluess, secretary, and Lewis Weeks, manager.

The Belt Railway Co. has leased to the American Cereal Co. the Indiana Elevator, grounds and switch tracks in South Chicago for a term of five years from July 20 at an annual rental of \$20,000. The elevator has a storage capacity of 2,500,000 bushels and is located on the south branch of the Chicago River at Nineteenth Street and Stewart Avenue.

It is stated that the four large grain elevators in Chicago owned by the Chicago Terminal Railway Elevator Co. will likely be placed upon the market soon. The elevators have been in litigation for about five years and the company is in bankruptcy. The properties are the Iowa; Galena, Union and City. The trustee, Col. John S. Goodwin, is in charge.

The Zorn Grain Co. of Decatur, Ill., has leased the ground at Ogden, Ill., which was occupied by the Daggett Elevator before its destruction by fire on June 30, and will erect a new elevator on the site. The company has also taken over the corn cribs, which were saved at the time of the fire. The insurance on the elevator and contents was settled at \$3,400. The loss was about \$6,500.

Captain J. L. Kirk of Sullivan, Ill., is establishing a new town on his farm in Moultrie County. The town will be on the Wabash Railroad about four miles north of Windsor, Ill. Captain Kirk will erect a large grain elevator and establish a coal and lumber yard. The railroad will put in a side-track. The town site has not been named, but it will probably be called Whitgrain or Grainkirk.

THE DAKOTAS.

An elevator is wanted at Driscoll, N. D.

A new elevator will be built at Bloom, N. D.

An elevator is being erected at Winfred, S. D.

Another elevator will be built at Stanley, N. D.

P. P. Zink is building an elevator at Melville, N. D.

Another elevator will be built at Buchanan, N. D.

M. King's elevator at Yankton, S. D., is being enlarged.

The fourth elevator is now being erected at Wales, N. D.

New elevators are to be built at Deubigh and Norwich, N. D.

Walton & Davis are building a new elevator at Dickinson, N. D.

The Northland Elevator Co. is erecting an elevator at Calio, N. D.

Dwyer & Olson are building a 40,000-bushel elevator at Medina, N. D.

It is reported that another elevator will be erected at Wheelock, N. D.

E. B. Page of Leeds, N. D., has secured an elevator site at Antler, N. D.

The new elevator of the Moody County Grain Co. at Egan, S. D., is completed.

The Washburn Elevator Co.'s new elevator at Underwood, N. D., is completed.

George Game and James Caldervale are building an elevator at Jamestown, N. D.

The Acme Grain Co. is rebuilding and enlarging its elevator at Binford, N. D.

Julius Wirkus has opened his elevator at Miuto, N. D., for the purchase of barley.

Regan & Lyness are building an addition to their elevator at Fessenden, N. D.

The N. P. Railway Co. has granted a site for the third elevator at Pingree, N. D.

The new Farmers' Elevator at Corona, S. D., is reported about ready for business.

The McCaull-Webster Elevator Co. has completed its new elevator at Utica, S. D.

W. R. Hendry, who recently gave up the management of the McCabe Elevator at Cavalier,

N. D., will build an elevator of his own at the new town of Calvin, in Cavalier County.

The Farmers' Elevator Co. of Buffalo, N. D., is remodeling and enlarging its elevator.

Phipps & Keen have succeeded A. L. Foster in the grain business at West Hope, N. D.

An elevator to cost \$10,000 will be built by the Farmers' Elevator Co. of Esmond, N. D.

Construction work on the new Farmers' Elevator at Underwood, N. D., is now in progress.

The Wiltse Elevator at Lansford, N. D., has been moved to a new location on the Soo Line.

The Farmers' Elevator Co. of Fredonia, N. D., has been chartered with a capital of \$5,000.

Fritz & Harris have put in a new dump, scales, etc., at their elevator in St. Lawrence, S. D.

Mundt & Peterson have reopened their elevator at Crooks, S. D., with H. D. Mundt as buyer.

George Lippman is installing an improved Hall Distributor in his elevator at Granville, N. D.

The new Northland Elevator at Grafton, N. D., on the Soo right-of-way, is ready for operation.

A. A. Truax has his new elevator at Hartford, S. D., completed. John L. Johnson is the agent.

The Winfred Farmers' Elevator Co. of Winfred, S. D., has been chartered with a capital of \$25,000.

The Great Western Elevator Co. has put a new foundation under its elevator at Blanchard, N. D.

The announcement is made that another elevator will be erected at Centerville, S. D., this fall.

The Farmers' Mill and Elevator Co. of Devils Lake, N. D., has let the contract for its new elevator.

Three more elevators are to be erected at Hampden, N. D., making a total of six at that point.

The Farmers' Elevator Co. of Hannaford, N. D., is reported about to buy the Hyde Elevator at that place.

Doering, Kayser & Co. have installed an improved Hall Distributor in their elevator at Parkston, S. D.

The Kathryn Farmers' Mutual Elevator Co. of Kathryn, N. D., has been chartered with a capital of \$10,000.

The Langford Farmers' Elevator Co. will build an elevator at Langford, S. D., as soon as a site is secured.

Winnor & Adams have let the contract for the erection of a 35,000-bushel grain elevator at Cleveland, N. D.

The Farmers' Elevator Co. of West Hope, N. D., capitalized at \$25,000, has filed articles of incorporation.

The New London Milling Co. has equipped its elevator at Irene, S. D., with an improved Hall Distributor.

The Farmers' Elevator at Wakonda, S. D., is about completed. This makes the fourth elevator at that point.

The Powers Elevator Co. has torn down its old elevator at Steele, N. D., and is erecting a modern one on the site.

A farmers' elevator is being built at Crooks, S. D. The work was recently delayed by a strike of the carpenters.

The Huron Milling Co. of Huron, S. D., has just completed a modern 25,000-bushel elevator near its 150-barrel mill.

Helgeson Bros. have sold their elevator at Omamee, N. D., to the Osborne-McMillan Elevator Co. of Minneapolis.

Business men and farmers at Ashton, S. D., have organized the Ashton Elevator Co. and bought the old Latimer Elevator.

The Blankenbury Elevator Co. has erected a concrete engine house and installed a new gasoline engine at Oakes, N. D.

Repairs and improvements have just been made to Gold & Co.'s elevator at Corona, S. D. A feed mill outfit was installed.

The Farmers' Grain, Stock and Fuel Co. of Maddock, N. D., has equipped its elevator with an improved Hall Distributor.

It is stated that applications for eighteen elevator sites have been made at McClusky, N. D., and fourteen at Turtle Lake, N. D.

The St. Anthony & Dakota Elevator Co. is rebuilding its elevator at St. Thomas, N. D., which was destroyed by fire some time ago.

The Reliance Elevator Co. of Minneapolis, Minn., has awarded its contract to the Younglove Construction Co. for a 15,000-bushel grain elevator, at Chester, S. D.

The Farmers' Elevator Association of Wyndmere, N. D., capitalized at \$50,000, has been granted a charter and let the contract for the erection of an elevator. The building will be

equipped with modern machinery and operated by a 15-horsepower gasoline engine.

The Farmers' Elevator Co. of Great Bend, N. D., has its new elevator completed and ready for business. Frank Knuppel will be manager.

The north half of the Minneapolis & Northern Elevator Co.'s elevator at Park River, N. D., has been torn down and moved to Milton, N. D.

A farmers' organization has been formed at Russell, N. D., and a co-operative elevator will be built. The concern is capitalized at \$10,000.

The National Elevator Co. has built a new office building and engine house at Hamilton, N. D. Repairs to the elevator have also been made.

Two new elevators will be built at Ray, N. D., one by the St. Anthony & Dakota Elevator Co. and the other by a party from Omamee, N. D.

George L. Chesley has sold his elevators at Armour and White Lake, S. D., to Schaffer Bros. of Tripp, S. D. The consideration was \$8,500.

H. E. Perkins of Omaha, Neb., has been looking over the ground at Napoleon, N. D., with a view to building an elevator and establishing a lumber yard.

The Enderlin Farmers' Elevator Co.'s new elevator at Enderlin, N. D., is completed and in operation. L. Shepard of Sheldon, N. D., is manager.

The New London Milling Co. of Willmar, Minn., has purchased an improved Hall Distributor for the new elevator which it is building at Viborg, S. D.

The Winter & Ames Elevator at Rugby, N. D., has been moved from its former location in the Great Northern yards to a new site about 300 yards distant.

Nordmarken & Woodman have been remodeling their flat house at Riga, N. D. A dump scale, elevating machinery and a 6-horsepower gasoline engine have been installed.

The new elevator of the Atlas Elevator Co. at Henry, S. D., is completed. The new house is modern and replaces the old building which was torn down a short time ago.

Spalding Bros., who own elevators at Lamber-ton and Wanda, Minn., will build two new ones in North Dakota. One will be erected at Hampton and the other at Hoenick.

A site for the Farmers' Elevator at Honeyford, N. D., has been secured. The elevator will cost about \$6,500. C. J. Foss is president of the company, and W. W. Erb, secretary.

The Farmers' Elevator Co. of York, N. D., capitalized at \$15,000, has been granted a charter. M. K. Nybo is president, and W. J. Church, secretary. An elevator will be built.

James Whelan has completed the alterations and improvements to his elevator at St. Thomas, N. D. The house now has a capacity of 40,000 bushels and is practically new throughout.

Volga, S. D., parties have bought the elevator at Miller, S. D., owned by Charles Miller, but operated for some time by G. W. Van Dusen & Co. The latter firm will now build a new elevator at Miller.

A farmers' elevator company has been organized at the new town of Chester, Lake County, S. D., a station on the new railroad about 12 miles from Madison, S. D. L. Krumm is president, and Earl Spawn, secretary.

The Lyon Elevator Co. of Mandan, N. D., has let the contract for the erection of eleven new elevators east of the Missouri River. When they are completed the company's string will consist of over twenty elevators.

The Brinsmade Farmers' Elevator Co. has bought the Great Western Elevator Co.'s house at Brinsmade, N. D., and taken possession. A new engine has been installed in the elevator and necessary repairs made.

The South Dakota State Railroad Commission has been petitioned to compel the Milwaukee road to grant two elevator sites at Sandcut, a siding between Waubay and Summit, S. D. The place is not a regular station.

At Barlow, N. D., the farmers have organized and incorporated a co-operative grain company under the style of the Farmers' Elevator Co. The capital stock is \$10,000. An elevator with a capacity of about 50,000 bushels will be built. The officers are: E. Forbes, president, and Andrew Lucy, secretary.

C. W. Conroy has resigned his position as manager of the Mandan Mercantile Co.'s grain business at Dickinson, N. D., and associated himself with John D. Gruber, formerly of Mandan, N. D. They, with other capitalists, will establish a line of elevators and lumber yards along the Great Northern road. Mr. Conroy will be general man-

ager of the business, with headquarters at Minot, N. D.

Charles Huntimer is building a large elevator on his farm about three miles from Colton, S. D. The South Dakota Central Railway Co. has put in a side track. Mr. Huntimer contemplates engaging a buyer and doing a general grain business, as well as handling the crops from his large farm.

MISSOURI, KANSAS AND NEBRASKA.

Arthur Bros. have sold their elevator at Salem, Mo.

The new elevator at Pretty Prairie, Kan., is about completed.

J. B. Howard has engaged in the grain business at Crawford, Mo.

An 18,000-bushel elevator is being erected at Republican City, Neb.

E. B. Whitaker is building an elevator and feed mill at Garden City, Kan.

The new 250,000-bushel Wabash Elevator in Clay County, Mo., is completed.

The Farmers' Shipping Association of Lexington, Neb., will build an elevator.

A company is being organized at Chapman, Kan., to build a mill and elevator.

A. J. Frerking succeeds Gustavus A. Frerking in the grain business at Corder, Mo.

A. W. Frank has ordered an improved Hall Distributor for his elevator at Hays, Kan.

R. C. Epp has succeeded to the business of the Creighton Mill and Elevator Co. at Creighton, Mo.

The Holmquist Lumber & Grain Co. has installed a new car loader at its elevator in Emerson, Neb.

George Williams has put in a grain dump and is building an addition to his elevator at Thayer, Kan.

The Wells-Hord Grain Co. has ordered an improved Hall Distributor for its elevator at Archer, Neb.

Seeley, Son & Co. of Fremont, Neb., are building an elevator at Monroe, Neb., for the Omaha Elevator Co.

The Updike Grain Co. has purchased an improved Hall Distributor for its elevator at Morse Bluff, Neb.

The Woodston Mercantile Co. of Woodston, Kan., has installed a 10-horsepower Witte Gasoline Engine at its elevator.

The Marietta Farmers' Elevator Co. will rebuild its elevator at Marietta, Kan., which was burned early in the summer.

S. A. Austin has been building an addition to his elevator at Wilsonville, Neb., and otherwise increasing the capacity.

The Antle-Linley Grain Co. has leased the Hall-Baker Grain Co.'s Elevator "B" at Atchison, Kan., taking possession August 1.

The Farmers' Co-operative Co. of Danville, Kan., is installing an 8-horsepower Witte Gasoline Engine to operate its elevator.

Farmers around Stromer, Neb., a small station near Hastings, will erect a co-operative elevator on the Missouri Pacific right-of-way.

Elliott & Martin are building an addition, 25x100 feet, to their elevator and warehouse at Lebanon, Mo. It will have a cement floor.

The Farmers' Grain and Elevator Co. has succeeded the Sieber, Frank & Woerst Grain Co. in the grain trade at Hermann, Mo.

The Phillipsburg Mill and Elevator Co., Phillipsburg, Kan., has built a new office and put in new scales at its elevator in Logan, Kan.

The Blenkiron Grain Co. of Randolph, Neb., is building an elevator at the new town on the Great Northern five miles west of Plainview, Neb.

The Farmers' Elevator Co. of Blue Hill, Neb., has its flat house completed. An elevator will be built as soon as a suitable site can be secured.

The new warehouse now being built at the Great Northern Mills in Hartington, Neb., will have a capacity of from 20,000 to 25,000 bushels of grain.

Railsback Bros. of Ashland, Neb., have completed the remodeling of their elevator at Greenwood, Neb., and are building a new one at Memphis, Neb.

The new 1,000,000-bushel elevator of the Independent Elevator Co. at the grain terminals tract in Omaha, Neb., is reported about ready for operation.

E. H. Hasenwinkle will increase his elevator capacity at Hughesville, Mo. A 12-horsepower Witte Gasoline Engine will furnish power for operating the machinery.

The McPherson Farmers' Elevator Co. has been organized at McPherson, Kan., with a capital of \$10,000, to do a general grain business. The company has leased the Peavey Elevator for a term of one year, with the privilege of purchasing it at

the end of that period. The officers are: W. O. Mathes, president; Dave Grant, secretary, and D. F. Kuns, treasurer.

The new 250,000-bushel elevator of the South Park Elevator Co. in St. Joseph, Mo., is completed and in operation. It cost about \$50,000 and is thoroughly modern.

The American Grain Co. has completed a new warehouse, 24x24 feet, at Hartington, Neb. A gasoline engine has been installed to replace the old horse power.

The Marshall Mill and Elevator Co., Marshall, Mo., has bought William Pollock's 25,000-bushel elevator at Shackelford, Mo. B. A. Jones will have charge as manager.

Reports from Eddyville, Neb., state that the Farmers' Grain Co. of Buffalo County will erect several new elevators along the Callaway branch of the Union Pacific Railway.

Pickerill & Hill, proprietors of the Universal Mills at Clafin, Kan., are building a 20,000-bushel elevator at Redwing, Kan. It is said that they will also increase their storage capacity at Clafin.

The Whiting-Finn Grain Co. has been organized at Wichita, Kan., to do a wholesale grain business. The company is composed of J. J. Whiting and G. L. Hosford of Wichita and William Finn of Sedgwick, Kan.

The Farmers' Elevator Co. of Carroll, Neb., has bought and taken possession of the Benson Grain Co.'s elevator at that place. The consideration was \$5,000, and the coal sheds and flour house are included in the transfer.

J. H. Bitner has increased the handling capacity of his elevator at Shields, Kan., by the addition of new machinery. A 15-horsepower gasoline engine is being installed by the Witte Iron Works Co. of Kansas City, Mo.

W. N. Spellman has sold his elevator and grain business at Beatrice, Neb., to Norcross Bros. of that city, the consideration being \$4,000. The new owners, W. P. and H. H. Norcross, took possession August 10. They will enlarge the elevator and make other improvements.

The organization of the Pickrell Farmers' Elevator Co. at Pickrell, Neb., has been completed. M. W. Terry is president, and John Meintz, secretary. The company is composed of 166 farmers and has a capital of \$8,000. An elevator will either be built or purchased. The concern has the penalty clause in its by-laws.

It is now stated that the Missouri Pacific Railroad Co. will replace the sidetrack to the new elevator in Julian, Neb., built by James Peterson of the Coryell Grain Co. of Auburn, Neb. It seems that soon after the elevator was completed, a few months ago, the railroad company, for some unknown reason, tore up its sidetrack running to the elevator. On this account the elevator has been unable to handle any grain, as it had no shipping facilities.

The old Fowler Elevator at Tenth and Clark streets in Omaha, Neb., has been purchased by Thomas F. Hall. The house was formerly owned by the Fowler Co. and has not been operated for eight or ten years. It has a capacity of 150,000 bushels. Mr. Hall is spending \$15,000 on the plant in repairs and improvements, and it will soon be ready for operation. A new foundation is being built and new machinery installed. The elevator will be operated by eastern parties who have leased it from Mr. Hall.

The Updike Grain Co.'s new elevator in South Omaha, Neb., is completed and in operation. It is 167 feet high and has a storage capacity of 500,000 bushels. Storage tanks will be added from time to time as the needs of the business require. The total cost of the elevator and trackage facilities is about \$100,000. There are four tracks running to the house and connections are had with every line in Omaha, South Omaha and Council Bluffs. The elevator can handle 100 cars in and out in ten hours. The machinery is modern in every respect and is operated by electrical power, supplied by the Omaha Electric Light and Power Co.

Ground has been broken for the erection of Merriam & Holmquist's new grain elevator at Sherman Avenue and Manderson Street in Omaha, Neb., and construction work is now in progress. Seeley, Son & Co. of Fremont, Neb., are the architects and contractors. The elevator will be of frame, metal clad, 42x56 feet in size and 133 feet high. It will cost about \$40,000 and is to be ready for operation by November 1. The original plans called for a much smaller elevator than is now being built, but Merriam & Holmquist have concluded that a capacity of 1,000,000 bushels would not be too large, and eventually the elevator will have that capacity. When it is put in operation in November its capacity will be less than 1,000,000 bushels, but additions will be made to it later which will increase its capacity to 1,000,000 bushels. The elevator will be strictly modern in its equipment and appointments, and will be able to handle between 100 and

200 cars of grain a day. Storage tanks will be built as the necessities of the business require them. When completed, the elevator will be one of the largest and best equipped west of the Mississippi River.

Work on the Crowell Lumber and Grain Co.'s new 125,000-bushel elevator in Omaha, Neb., has been commenced, and it is expected to be completed and ready for operation about December 1. The Barnett & Record Co. of Minneapolis, Minn., has the contract. The new elevator will be located between Thirteenth and Fourteenth streets on Ohio Street and will have trackage facilities from both the Illinois Central and the Omaha railroads. It will be of frame, metal clad, 42x56 feet in dimensions and 170 feet high. The elevator will be so arranged that steel storage tanks can be added when more storage capacity is required. It will cost about \$46,000 and will be equipped with modern machinery, including two improved Hall Non-chokable Boots. The Crowell Lumber and Grain Co. operates a line of country elevators, with headquarters at Blair, Neb.

MINNESOTA AND WISCONSIN.

W. J. Awe is building an elevator at Holloway, Minn.

All three of the elevators at Oakland, Minn., are reported closed.

A farmers' elevator company has been organized at Leslie, Minn.

The Thorpe Elevator Co. is building an elevator at Sherack, Minn.

Gilbert Carlson has completed his new elevator at Dawson, Minn.

The new farmers' elevator at Holloway, Minn., is about completed.

It is stated that another elevator will be built at Lakeville, Minn.

E. G. Bennett is building an elevator and feed mill at Horicon, Wis.

An addition has been built to the Ericson Elevator at Lafayette, Minn.

The Western Elevator Co. is building a new elevator at Weaver, Minn.

Plans for a farmers' elevator have been completed at Wolverton, Minn.

James O'Hara is building an elevator on his farm near Lanesboro, Minn.

The Willmar (Minn.) Milling Co. will build an elevator at Clara City, Minn.

Nelson Bros. have their new elevator at Milroy, Minn., about ready for business.

E. L. Barnes has put in a new dump and scale at his elevator in Milton, Wis.

John and Oscar Johnson have engaged in the grain business at Brooten, Minn.

The Davenport Elevator Co.'s new house at Trosky, Minn., is about completed.

The Winter & Ames Elevator at Alberta, Minn., was reopened for business August 1.

The Schmid & Anderson Elevator at Springfield, Minn., has been reopened for business.

The Spaulding Elevator Co. of Warren, Minn., is building an elevator at Alvarado, Minn.

The new Farmers' Elevator at Olivia, Minn., will be ready for operation shortly after August 15.

The Plato Milling Co. has installed two improved Hall Distributors in its elevator at Plato, Minn.

The elevator at Sauk Rapids, Minn., is being remodeled and equipped with a line of new machinery.

Charles Hawkinson has put in new scales and built an office at his grain warehouse in Gratiot, Wis.

The Farmers' Elevator at Lamberton, Minn., was opened for business August 1, with G. Koenig as buyer.

H. M. Babcock of Dundas, Minn., is overhauling and remodeling his grain elevator at Farmington, Minn.

The Eagle Roller Mill Co. of New Ulm, Minn., has been remodeling its elevator at Redwood Falls, Minn.

The J. H. Kennedy Milling Co. of Glencoe, Minn., is building a 20,000-bushel elevator at Brownton, Minn.

J. A. Sherwin has sold his elevator at Fergus Falls, Minn., to the Ball Elevator Co. of Minneapolis, Minn.

The Farmers' Elevator Co.'s house at Ortonville, Minn., was opened August 1 with H. L. Zwiener as manager.

The Huson Bros. & Timm Co. has purchased the Milwaukee Elevator Co.'s elevator at Plymouth, Wis.

A farmers' elevator company has been formed at Brandon, Wis., to do a general grain business. The promoters intend to buy the Tinkham Ele-

vator, but if this is impossible will build a new one.

The new proprietors of the Alliance Elevator at Adrian, Minn., have repaired and put it in shape for business.

A new dump scale is to be installed in the Farmers' Co-operative Elevator Co.'s house at Hampton, Minn.

Farmers in the vicinity of Waters Siding, near Mankato, Minn., are agitating a co-operative elevator proposition.

E. L. Williams of Lake Benton, Minn., has purchased an elevator at Lester Prairie, Minn., and will move to that place.

Quinn Bros. have secured a site for their new elevator at Litchfield, Minn., and construction work is now in progress.

The new elevator of the Walter Bowman Elevator Co. at Grogan, Minn., is completed. J. Kinsella has charge as manager.

The Farmers' Elevator Co. of Airlie, Minn., has taken over the elevator recently purchased from the S. Y. Hyde Elevator Co.

The Monterey Farmers' Elevator Co., capitalized at \$10,000, has been chartered at Monterey, Minn., and purchased the Reis Elevator.

Miller Bros. have remodeled their Elevator A at Hastings, Minn., and installed a gasoline engine, new spouting, conveyors, etc.

The Farmers' Elevator Co. of Goodhue, Minn., will build a 15,000-bushel elevator. J. H. Nibbe is president, and T. W. Lally, secretary.

Queen, Bennet & Co. have bought the S. Y. Hyde Elevator Co.'s house at Elko (New Market P. O.), Minn., taking possession August 1.

Frank Richards has purchased the flat house at Stewart, Minn., which was built last fall by Theo. Richards, and has moved it to another site.

A co-operative elevator company has been organized at Storden, Minn., and is reported to have bought one of the line elevators at that point.

The Northern Grain Co.'s elevator, formerly the Farmers' Elevator at Buffalo, Minn., was opened for business August 1 with John Noel as buyer.

It is reported that the Hubbard & Palmer Co. has bought the Peavey Elevator Co.'s warehouse at Hadley, Minn., and will convert it into an elevator.

The New London Milling Co. of Willmar, Minn., has installed improved Hall Distributors in its elevators at Holland, Raymond and Clara City, Minn.

The R. E. Jones Co. of Wabasha, Minn., has purchased a site at Theilman, Minn., and will erect an elevator. It is to be ready for operation about October 1.

Martin & Hill of Dousman, Wis., have sold their elevator at Sullivan, Wis., to Rungard & Leon. The new owners are remodeling the house and will put in a feed mill.

The officials of the Omaha Railroad are said to be figuring on the erection of two large grain elevators on Chequamegon Bay either at Washburn or Ashland, Wis.

A farmers' elevator is being erected at Bird Island, Minn., by a company recently organized for that purpose. Nick Bruels is president, and Charles Kenning, secretary.

The North-Western Railway has granted an elevator site to the Farmers' Elevator Co. of Milroy, Minn. The contract has been let and work on the elevator commenced.

The Western Elevator Co. is building a 25,000-bushel elevator at Claremont, Minn. It replaces the one destroyed by fire and is of frame, metal clad, with a stone foundation.

The Wilkin County Farmers' Elevator Co. has purchased the old Duluth Elevator at Rothsay, Minn. The elevator is being repaired and a gasoline engine put in to operate it.

The Springfield Farmers' Elevator Co.'s new elevator at Springfield, Minn., was opened for business August 1. L. E. Potter is president, and C. S. Peterson, secretary and manager.

The Clinton Farmers' Elevator Co. of Clinton, Minn., at its recent annual meeting decided to operate its elevator during the ensuing year. An addition will be built to the elevator.

E. C. Stowe has sold his interest in the Wohlfelder Elevator Co. of Fairmont, Minn., to A. M. Woodard of Minneapolis for \$14,000. Mr. Stowe will locate in Washington or Oregon.

The Farmers' Elevator Co. of Edgerton, Minn., has been remodeling its elevator and building a warehouse. Allen Donaldson of Colman, S. D., took charge as manager on August 1.

The New Richmond Roller Mills Co., New Richmond, Wis., is remodeling and making important improvements to the old Jorstad Elevator at Baldwin, Wis. The building has been raised and put

on stone piers and the interior has been rebuilt. A full line of new and modern machinery is being installed.

The old McGregor Elevator at Windom, Minn., has been leased by a local organization of farmers and business men, of which W. F. Sanger is president, and Ole Hammerstad, secretary.

The farmers around Pipestone, Minn., are organizing a co-operative elevator company to be known as the Pipestone Farmers' Elevator Co. One of the local elevators will likely be purchased.

The New London Milling Co. of Willmar, Minn., is building an elevator at the new town on the Great Northern road about three miles northeast of Pipestone, Minn. The place has not been named yet.

David P. Wigley has purchased from the American Linseed Oil Co. the old mill building on the St. Paul tracks at the foot of Third Street, in Racine, Wis., and will convert it into an elevator and feed mill.

J. E. Danielson of Owatonna, Minn., has disposed of his business there and removed to Red Wing, where he has bought an interest in his father's grain business. The firm name will be J. M. Danielson & Co.

At the annual meeting of the Farmers' Warehouse Association of Kensington, Minn., it was decided to lease the elevator for the ensuing crop year. August Osterberg was elected president, and P. G. Peterson, secretary.

The new farmers' elevator company at Lismore, Minn., has completed its organization and elected Andrew Peters president and Barney Thier secretary. The capital stock is \$20,000. One of the local elevators will probably be purchased.

The Farmers' Elevator Co. of Vesta, Minn., has completed its organization and elected F. D. Gray president and James Arnold secretary. The company is capitalized at \$4,000 and has purchased the Western Elevator Co.'s house at Vesta.

The Franklin Milling Co. is now operating the elevators at Wood Lake and Belview, Minn., owned by the Northern Grain Co. A flour exchange will be conducted in connection with the grain business at Wood Lake. E. P. Ellingson is in charge.

The S. Y. Hyde Elevator Co. of La Crosse, Wis., has sold its line of elevators on the M. & St. L. Railway in Minnesota to the Bennett Grain Co. of Flandreau, S. D., with the exception of the one at Cleveland, Minn., which was bought by a farmers' organization.

The Bertha Farmers' Elevator Co. is a new organization, capitalized at \$4,000, which has purchased the Stedman Elevator at Bertha, Minn., taking possession August 1. The principal officers are Emil J. Kohlase, president; J. G. Gebhard, treasurer and manager, and Frank Foster, secretary.

Henry Wierwill has purchased the elevator at Le Sueur, Minn., formerly owned by himself and Messrs. Schlegel and Funk, from E. H. Bauch of St. Paul. The elevator has a capacity of 75,000 bushels and is valued at \$3,500. Edward Wierwill, a son of the purchaser, who has been operating the house under lease, will continue to have charge of it.

The Hatfield Farmers' Elevator Association has filed articles of incorporation with a capital stock of \$25,000. The organization has purchased the elevator at Hatfield, Minn., formerly owned and operated by the late John Haubrich, for a consideration of \$2,700 and will operate it. The officers are: President, James L. Pollock; secretary, J. H. Wiener; treasurer, J. F. Delaney.

Olaus Halvorson has bought the old Hogan Elevator at Paynesville, Minn., formerly operated by the Minnesota Grain Co., and moved it to Brooten, Minn. Mr. Halvorson is an experienced grain man and will operate the elevator at its new location as soon as it is in shape for business. This makes five elevators at Brooten, and with the two mills also buying grain there gives the town seven grain buyers.

A. L. Wirtz, a grain dealer of Kaukauna, Wis., will build a grain elevator, cold storage plant and hay sheds at Antigo, Wis. The plant will be located between Seventh and Eighth avenues in that city, and will have a frontage of nearly 400 feet. About \$30,000 will be invested. The elevator will have a capacity of 30,000 bushels and the hay shed will hold 2,000 tons. The plant will be in operation next fall.

The Soo line will abandon Otisville, Minn., as a shipping station and has notified the owners of the elevator and the warehouses to move them to Copas, a new station about a mile nearer St. Paul. The grain warehouse owned by the Osceola Mill and Elevator Co. will be moved to Maple Island, and the potato warehouse, owned by the same company, will be moved to Copas. The elevator is operated by Charles Eckdahl. The residents of Otisville have filed a protest against the removal

of the sidetrack with the State Board of Railway Commissioners. Frank Lake of New Scandia has bought a site at Copas and will erect an elevator there.

The Farmers' Co-operative Elevator, Coal and Lumber Co. is the style of the new organization at Austin, Minn., composed of Mower County farmers. The officers are: President, Maurice Cotter; secretary, Abe Newell; treasurer, Charles Rice. The concern has a capital stock of \$10,000 and will build an elevator on the C. G. W. right-of-way. A general grain, fuel and live stock business will be conducted.

The Farmers' Elevator Co. of Wanamingo, Minn., has been organized with a capital of \$10,000 to build a co-operative elevator. A site has been secured from the C. & M. & St. P. Railway and the contract for a 28,000-bushel elevator awarded to the Younglove & Boggess Co. of Mason City, Iowa. It will be operated by an 11-horsepower gasoline engine and a four-ton dump scale will be included in the equipment. The elevator will be completed by September 15.

The Colonial Elevator Co., which was organized last winter, and purchased a part of the S. Y. Hyde Elevator Co.'s line of elevators, has changed its corporate name to the Bennett Grain Co. The stockholders are W. A. Quinn of Wells, Ed. Babcock of Winnebago City, Minn., J. E. Peart and J. M. Bennett of Flandreau, S. D. The company now owns elevators at Winnebago City, Easton, Minnesota Lake, Airlie, Pipestone, Jackson, Edgerton, Eastman and Lakefield, Minn., and Flandreau, S. D. The headquarters are at the latter place. Mr. Peart will have charge of the elevator at Flandreau and Mr. Babcock of the one at Winnebago City.

The Pierce-Stephenson Elevator Co. has been incorporated at La Crosse, Wis., with a capital stock of \$100,000. The officers are: President, W. H. Pierce, Dexter, Minn.; vice-president, Martin Stephenson, Brownsdale, Minn.; secretary, F. L. Stoddard, La Crosse; assistant secretary and manager, Robert Eckford, Dexter. Although the company was chartered under Wisconsin laws its general office will be at Dexter, Minn. The company has purchased a line of thirteen elevators in Minnesota, between Rushford and Alden, from the S. Y. Hyde Elevator Co. of La Crosse. The consideration was \$15,000. The houses are located on the Southern Minnesota division of the Milwaukee road. The Pierce-Stephenson Elevator Co. now owns about twenty elevators.

WESTERN.

Watson Bros. are erecting a grain warehouse at Kennewick, Wash.

The elevator at Wellington, Colo., is being enlarged and improved.

Calvert & Davidson have engaged in the grain business at Palouse, Wash.

Frank Friese & Son are enlarging their grain warehouse at Palouse, Wash.

It is reported that H. W. Seal will erect a grain warehouse at Odessa, Wash.

I. G. Hardesty succeeds Hardesty & Wilson in the grain trade at Rosalia, Wash.

E. E. Record succeeds N. F. Kimball in the grain business at Weiser, Idaho.

W. C. Barnard & Co., grain dealers at San Francisco, Cal., have dissolved partnership.

J. N. Gillis & Son have succeeded H. F. Oesting & Son in the hay and grain business at San Diego, Cal.

Henry Johnson & Son have leased their warehouse at Krupp, Wash., to a Seattle grain company.

The Colton Grain and Milling Co.'s new warehouse at Perris, Cal., is now completed. It has a capacity of 100,000 sacks of grain.

The recently chartered McMillan Grain Co. of Portland, Ore., has purchased the retail department of the Pacific Grain Co.'s business.

The Cleveland Co-operative Mercantile Co. has been incorporated at Cleveland, Utah, with a capital of \$15,000, to deal in grain and implements.

J. H. Misner, who recently resigned his position as deputy treasurer at Davenport, Wash., has leased the Tacoma Grain Co.'s warehouse at Sprague, Wash., and will engage in the grain business.

The United States Quartermaster's Department will open bids at 10 o'clock a. m., August 19, at Seattle, Wash., for 2,500 tons of Eastern Washington double-compressed timothy; for 3,000 tons good white merchantable oats, best quality, double sacked (old crop), delivery to be made at the government dock, Seattle or Tacoma, between August 26 and September 15, in such quantities and at such time as the contracting officer may indicate. Proposal blanks and further information

will be furnished by J. E. Savage, quartermaster's agent at Tacoma.

At Creston, Wash., four companies will compete for the grain business this year. They are the Creston Milling Co., the Columbia River Milling Co., the Wilbur Grain Co. and the Tacoma and Puget Sound Grain Co.

A report from Spokane, Wash., states that the 60 warehouses in Whitman County, Wash., and Latah County, Idaho, will each handle on an average 15,000 bushels more of grain this year than last. Harvesting is now in progress.

The Kendrick Rochdale Co., a farmers' co-operative organization, has completed its new grain warehouse at Kendrick, Idaho. The building is 40x120 feet in size and 30 feet high. It is of frame, metal clad, and cost about \$3,000. H. N. Nelson has been selected as manager.

OHIO, INDIANA AND MICHIGAN.

The Gilliland Grain Co. of Van Wert, Ohio, has sold out.

D. L. Leas' new elevator at Waterloo, Ind., is in operation.

Jones & Sheets succeed E. C. Nutt in the grain business at Sidney, Ohio.

The new Bright Elevator at Addison, Ohio, has been opened for business.

The grain firm of Harris & Hickman at Evansville, Ind., has been dissolved.

Posey & Garrison, grain merchants at Tennyson, Ind., have dissolved partnership.

Letherman & Ebersole, grain dealers at Canton, Ohio, have dissolved partnership.

L. G. McKnight & Co., grain dealers at St. Johns, Mich., have dissolved partnership.

The Farmers' Grain Co. of Covette, Ohio, has been incorporated with a capital of \$1,000.

F. H. Stewart has leased and will operate the elevator and hay barn at Montpelier, Ohio.

Bartlett, Kuhn & Co. have been making some improvements to their elevator at Cayuga, Ind.

Ranck & Leffler are using a portable dump to carry on their grain business at St. Paul, Ind.

Joseph Frutchey, of the Cass City Grain Co., Cass City, Mich., is building an elevator at Deford, Mich.

F. Lockwood has sold the elevator at Laingsburg, Mich., to McLaughlin, Ward & Co. of Jackson, Mich.

The elevator at North Liberty, Ind., which has been closed for some time, may be reopened this fall.

The Stockbridge Elevator Company has succeeded Wellman & Son in the grain business at Clio, Mich.

The Dunlap Elevator at Williamsport, Ohio, has been leased by the Heffner Milling Co. of Circleville, Ohio.

The elevator at Deedsville, Ind., will shortly be reopened for business under the management of Leander Leedy.

The Pierce Elevator Co., an Indiana corporation, has been licensed to do business in Ohio, with headquarters at Union City.

The Lacota Cider, Vinegar and Milling Co. of Lacota, Mich., has put in a sidetrack to its mill and factory and will purchase grain in carload lots.

J. E. Morrison and F. A. Finch have leased H. C. Clark's elevator at Hazelrigg, Ind. The new management will handle grain, seeds, flour, fuel and wool.

H. S. Grimes of Portsmouth, Ohio, has leased the 60,000-bushel elevator on the Norfolk & Western Railroad at Lockbourne, Ohio, owned by E. T. O'Hara.

W. F. Nicolai of Hopkins Station, Mich., has begun the erection of a small elevator and feed mill. The capacity of the elevator will be about 4,000 bushels.

The National Grain Co. of Indianapolis, Ind., has increased its capital stock from \$1,000 to \$15,000. J. G. Hermann, A. H. Wilkinson and B. J. Prater are the directors.

The Heffner Grain Co. of Circleville, Ohio, has been incorporated with a capital stock of \$10,000. Harvey S. and W. F. Heffner and Clarence Curtain are the incorporators.

William H. Small & Co., grain, seed and produce dealers of Evansville, Ind., will erect a new store and warehouse building in that city. A site near the L. & N. terminals has been secured.

William Donlin of Delphi, Ind., has leased the Lowe Elevator at Monticello, Ind., and taken possession. The elevator has been undergoing repairs preparatory to handling the coming crop.

Richards & Evans are building a new grain elevator near their flour mill at Cortland, Ohio. The new house will be 50 feet high, of cribbed construction, and 35x40 feet in size. The foundation and basement will be of stone. The pit will be 11 feet deep. The elevator will be equipped with

modern machinery, including a power shovel, and will be operated by steam power.

At Mt. Morris, Mich., Lewis, Horton & Co. succeed J. H. Lewis, dealer in hay, grain, beans and produce. The change was effected August 1. There is no change in the character of the business.

The Stockbridge Elevator Co. of Jackson, Mich., has increased its capital stock from \$40,000 to \$100,000. The company owns and operates a total of twenty-five elevators in the state of Michigan.

Means & Senour of Shelbyville, Ind., have sold their elevators at Boggs town, Fairland and London, Ind., to the Nading Mill and Grain Co. of Shelbyville and the one at Acton, Ind., to O. L. Means.

The Taylor Grain Co. is now repairing, remodeling and enlarging its elevator at Montmorenci, Ind. The house will have a capacity of 55,000 bushels when the work is completed about September 1.

W. T. McBride has sold his elevator at Frankfort, Ind., to J. T. Sims of that city. This gives Mr. Sims four elevators in Clinton County. The elevator at Frankfort is on the Monon right-of-way.

F. A. Jenkins & Co. have enlarged and remodeled their elevator at Norwalk, Ohio. The capacity was greatly increased and new grain cleaning and elevating machinery and new hopper and dump scales have been installed.

Sneath & Cunningham of Tiffin, Ohio, have awarded their contract to the Burrell Engineering & Construction Co. for a 60,000-bushel transfer elevator at that place. It will be operated by two 40-horsepower Fairbanks Gasoline Engines.

McLaughlin Bros., proprietors of the elevator at Holly, Mich., will buy wheat this season. Heretofore the firm has made a specialty of beans, rye, etc. Since the closing of the mill two years ago there has been no market for wheat in Holly.

Logan Henshaw has sold his grain and seed business at New Castle, Ind., to G. & W. B. Starr. Mr. Henshaw has been in the grain business at New Castle for ten years. He will go to the Pacific Coast on account of the health of his family.

F. M. Smith has sold an interest in his grain, flour and fuel business at Lima, Ind., to W. G. Sweitzer, and the firm name is now Smith & Sweitzer. The firm will operate both elevators at Lima, Mr. Smith having charge of one and Mr. Sweitzer the other.

The National Elevator Co. has been chartered at Toledo, Ohio, with a capital of \$10,000. The incorporators are: C. L. and Albert B. Cutter, A. C. Brantingham, George J. Rudd and George H. Beckwith. The new corporation is a subsidiary company of the National Milling Co.

B. F. McNall, for several years associated with Wilbur Nelson in the grain business at Ithaca, Mich., conducted under the style of the Nelson Grain Co., has sold his interest to Mr. Nelson and will engage in farming. Mr. Nelson will continue the grain business as heretofore.

W. A. Goings has disposed of his interests at Cambridge City, Ind., and purchased the business of the Richmond Elevator and Milling Co. at Richmond, Ind. Mr. Goings has taken possession of the business and will move his family to Richmond this fall. He is an experienced mill and grain man.

George and Howard Little have purchased Ervin Bros.' grain elevator at Xenia, Ohio, and taken possession. The elevator was formerly owned by the Littles and they will operate it under the old style of the Little Grain and Seed Co. The building is being overhauled, and Howard Little will have charge as manager.

The annual meeting of the Jay Grain Co. was held at St. Marys, Ohio, on July 14 and the following officers were elected: D. W. Jay, president and general manager; T. K. Jay, secretary and treasurer. The Jay Grain Co. operates elevators at Elwood, Mulberry, Gillman, Orestes, Muncie, Royerton, Desoto, Redkey, Shiedler and Oakville, Ind., and Fort Recovery, Ohio.

The elevator at Avoca, Mich., has been purchased by the Richmond Elevator Co. of Lenox, Mich. The company has torn out and rebuilt the interior of the building and converted it into a first-class house with a storage capacity of about 12,000 bushels. The elevator has been equipped with an 18-horsepower Olds Gasoline Engine and a Clipper Cleaner. It is operated under the immediate management of Hill & Wadsworth.

The Burch-Wyman Grain Co. has been incorporated at Clare, Mich., with a capital stock of \$10,000. One-half the stock is held by the Saginaw Milling Co. and the remainder by Burch & Wyman. The officers of the new company are: H. H. Carr of Saginaw, president; J. Wyman, vice-president, and M. Burch, secretary, treasurer and general manager. The company has purchased John T. Hornung's elevator and will operate it. The lime, cement and fuel business, formerly owned by F. B. Doherty, has also been secured and will be conducted in connection with the grain trade and the produce business heretofore conducted by Burch &

Wyman. The company will make a specialty of handling beans and will employ a large force of help in that department.

Gray Bros. have sold the Big Four Elevator and their grain, flour and feed business at Crawfordsville, Ind., to Albert King. The new owner has taken possession and will conduct the business under the style of the Crawfordsville Coal and Grain Co., the same as heretofore. Mr. King is a native of Rochester, Ind., but has resided in Crawfordsville for several years. Gray Bros. will locate in the West, probably in Colorado.

EASTERN.

E. J. Richmond has purchased J. H. Powers' grain business at South Royalston, Mass.

E. Horvitz & Son succeed the firm of Horvitz Bros. in the grain business at New Bedford, Mass.

William Phillips has installed an engine and feed mill in his grain warehouse at Rawson, Conn.

Benjamin F. Ellis, dealer in grain, wood, lumber, etc., at Scotland, Mass., has bought the Eastern Grain Co.'s plant at that place.

The Eastern Grain Co. has completed the addition to its plant at Bridgewater, Mass., and installed a line of new machinery.

The recently chartered Hingham Grain Mill Co. has taken over the hay and grain business at Hingham, Mass., formerly conducted by the late Benjamin Andrews.

E. Crosby & Co., wholesale and retail dealers in grain and flour at Brattleboro, Vt., will enlarge their grain warehouse by the addition of another story and install new elevating and grain handling equipment.

The foundation for the W. N. Potter Grain Co.'s new elevator and warehouse at Gardner, Mass., is in and work on the superstructure has been commenced. The building is expected to be ready for use about November 1.

Henry A. Bugbee's new elevator and grain store at Willimantic, Conn., is completed. On account of the refusal of one non-resident property owner to permit the Central Vermont Railroad to build across the rear of his property, the spur track to the plant has not yet been put in.

Albert M. Thompson, dealer in flour, grain and hay at Worcester, Mass., has sold out and retired from active business. George A. Stevens, also a grain and flour dealer, is the purchaser of Mr. Thompson's store. The latter has been in the grain trade at Worcester for thirty-five years. He retires to take a rest. Mr. Stevens will continue the business at the same location.

A. J. Wheeler of Buffalo, N. Y., has awarded to the Steel Storage and Elevator Construction Co. of that city the contract for building a fireproof steel grain elevator on the site formerly occupied by his old Ontario Elevator, which was wrecked by an explosion last fall. The new elevator will cost about \$200,000 and will have a capacity of over 500,000 bushels. The machinery will be driven by electrical power. Construction work will be commenced at once and the elevator will be rushed to completion as rapidly as possible.

CANADIAN.

Turner & McMichael are building an elevator at Kinistino, Sask.

W. L. Thompson will erect a large grain elevator at Spring Coulee, Alta.

A 50,000-bushel elevator will be built at Okotoks, Alta., by the Alberta Pacific Elevator Co.

The flour and feed firm of D. J. Burke & Co., Winnipeg, Man., has been dissolved. P. D. Buchanan retiring.

It is announced that the Lake of the Woods Milling Co. will erect an elevator at Victoria Harbor, Ont., a Georgian Bay port.

The Ninga Milling Co., capitalized at \$35,000, has been chartered at Ninga, Man., to do a general grain and milling business.

Furney & Oliver of Flesherton, Ont., have leased F. A. Metcalf's grain business at Burford, Ont., taking possession August 1.

William McLandress has sold his grain and fuel business at Dutton, Ont., to Levi Pollard of Wallace town, Ont. Possession will be given about September 1.

George Warrell & Co., flour, feed and grain merchants at New Lisheard, Ont., have dissolved partnership. The business will be continued by Mr. Warrell individually.

The Lake of the Woods Milling Co. has about completed a large addition to its elevator at Keewatin, Ont., to further facilitate the cleaning and handling of wheat. The capacity of this elevator is now 650,000 bushels. The company has seventy storage elevators along the main line and branches of the Canadian Pacific Railway and is building

ten new ones. The houses range in capacity from 25,000 to 40,000 bushels.

It is announced that the Grand Trunk Railway Co. will build a spur track to the new 2,000,000-bushel elevator which the Dominion Government is erecting on the water front at Port Colborne, Ont.

The Macdonald Engineering Co. of Chicago has been awarded the contract for the erection of the 500,000-bushel elevator and 5,000-barrel flour mill for the Keewatin Flour Mills Co., Ltd., at Keewatin, Ont. The plant will be practically fireproof, the buildings being entirely of steel-concrete construction. The elevator will be built on the tank plan and will be capable of indefinite enlargement. A large cooperage factory will also be erected in connection with the mill and elevator. The buildings are to be completed by January 1, 1906, and construction work will be pushed as rapidly as possible. The plant will cost about \$750,000 and will be thoroughly modern. The water privilege owned by the company at Keewatin will be developed to the extent of 2,000 horsepower. This will be used for driving the mill and elevator and furnish electric current for other purposes. In addition to the plant at Keewatin the milling company will acquire or erect and operate a line of elevators throughout the Canadian West.

IOWA.

The new elevator at Aredale, Iowa, is completed.

D. E. McLaughlin's new elevator at David, Iowa, is completed.

M. D. Gurnett is building a 20,000-bushel elevator at Barnum, Iowa.

The new Hamilton Elevator at Modale, Iowa, is now in operation.

David Kilgore has been remodeling and enlarging his elevator at West Chester, Iowa.

John Fisher has succeeded W. T. Kelso in the grain business at River Junction, Iowa.

The Farmers' Elevator Co. of Ayrshire, Iowa, has bought the De Wolf Elevator at that place.

L. M. Slaba and U. A. Dressman will erect a 10,000-bushel elevator at Buffalo Center, Iowa.

The Wheeler Grain and Coal Co. has moved its general offices from Laurens to Fort Dodge, Iowa.

Arthur Agnew is building an addition, 18x28 feet and 16 feet high, to his elevator at Dunkerton, Iowa.

The D. Rothschild Grain Co. of Davenport, Iowa, will erect large elevators at Mt. Joy and Blue Grass, Iowa.

The Farmers' Elevator Co. of Ottosen, Iowa, has purchased and taken possession of the Simpson Elevator at that place.

The Kunz Grain Co. has been incorporated at Wesley, Iowa, with a capital of \$50,000. Julius Kunz and others are the incorporators.

The Farmers' Elevator Company of Audubon, Iowa, has been incorporated with a capital of \$15,000. William Gartner is one of the incorporators.

The Farmers' Elevator Co. of Lanyon, Iowa, has leased the Brown Elevator at that place. A. C. Peterson will continue as manager of the house.

The Des Moines Elevator Co. has been overhauling its elevator at Oakland, Iowa. The steam plant was replaced by a 15-horsepower Witte Gasoline Engine.

The Farmers' Elevator Co. of Bode, Iowa, has bought C. J. Hilland's elevator, lumber yard and coal business at that place. Possession was given at once.

Repairs and improvements have been made to the Northern Grain Co.'s elevator at Breda, Iowa. The improvements include a new foundation and a cement floor.

Tom Bird of Marcus, Iowa, has bought Flemming Bros.' elevator at Bonair, Iowa. He took possession August 1 and will give the business his personal attention.

J. L. Ingledue Jr. has moved from Marshalltown to Albion, Iowa, and taken possession of the grain, lumber and coal business recently purchased from P. F. Arney.

The Farmers' Elevator Co. of Gilman, Iowa, has purchased L. G. Beale's elevator at that place and will take possession about September 5. The consideration was \$3,500.

A. Mitchell has purchased the building in Cincinnati, Iowa, used by R. C. Nugent as a blacksmith and machine shop, and will convert it into a feed mill and grain warehouse.

H. J. Sahs has bought the grain business and warehouse of T. J. Ryan at Floyd Crossing, Iowa, and has torn down the old building and is erecting a modern elevator on the site. James McKendrick will have charge of the elevator as buyer. Mr. Sahs has also purchased an elevator at Double-

day and leased one at Charles City, Iowa. He is an experienced grain man, having spent nine years in this line.

C. H. Cooper has sold his elevator and residence at Hancock, Iowa. The names of the purchasers have not been learned. Mr. Cooper has been in business at Hancock for about seven years.

The Dysart Elevator Co. has sold its elevator and grain business at Dysart, Iowa, to H. A. Wiese. A tract of 30 acres of land owned by Mr. Wiese was part of the consideration in the transaction.

Alex. Fraser of Aurelia, Iowa, has purchased D. S. Goodrich's elevator at Alta, Iowa, for a consideration of \$6,500. The elevator has a capacity of 10,000 bushels and will be operated under the management of Arthur Fraser.

The Dayton Farmers' Elevator Co. has been incorporated at Dayton, Iowa, with a capital of \$15,000. A. L. Leonard is president, and C. E. Sonquist, secretary. The company has bought the Peavey Elevator on the M. & St. L. right-of-way.

The Hunting Elevator Co. has torn down its old elevator in Rudd, Iowa, and is erecting a modern one on a more desirable site. The old elevator was built by E. F. Bacon, one of the early settlers of the town, and operated by him for many years.

E. D. Joes has bought the Councilman Elevator at Oxford, Iowa, from the Chicago Grain and Elevator Co. for a consideration of \$1,200. Mr. Jones is an experienced grain man and was in charge of the house for the former owners. The elevator is on the C. R. I. & P. Railway.

The Younglove Construction Co. has contracts for a 20,000-bushel elevator at Barnum, Iowa, for the Barnum Elevator Co. of that place, a 10,000-bushel elevator at Walnut, Iowa, for the Walnut Milling Co., besides repair work at Manson, Iowa, for the Wheeler Grain & Coal Co.

W. H. Stipp of Marshalltown, Iowa, has purchased the Marshall Elevator Co.'s house at St. Anthony, Iowa, taking possession August 1. The consideration was \$3,000. This gives Mr. Stipp control of the entire grain business at St. Anthony, as he has owned the only other elevator in the town for about twelve years.

SOUTHERN AND SOUTHWESTERN.

The H. T. Weathers Grain Co. succeeds H. T. Weathers in the grain business at Greenville, Texas.

The Dazey-Moore Grain Co. of Fort Worth, Texas, has been incorporated under the same style.

The Kirk-Miller-Gosey Grain Co. of Beaumont, Texas, has changed its name to the Gosey-Miller Co.

The Dixie Grain Co. is installing machinery in its buildings at Shelbyville, Tenn., and expects to be ready for business by October 1.

The Binger Gin and Grain Co. has been chartered at Binger, Okla., with a capital of \$10,000. A. H. Bales, A. G. and F. M. Fulkerson, R. L. Winchell and E. C. McWilliams are the incorporators.

J. W. O'Bryan has purchased an interest in the business of the Owensboro Grain Co. of Owensboro, Ky. Mr. O'Bryan has been the bookkeeper at C. W. Bransford's flour mill for several years.

A. T. Swartz, W. W. Stripling and J. N. Tiller have entered into a copartnership at Ocala, Fla., to do a wholesale feed and grain business. Quarters in which to carry on the enterprise have been secured.

The Kaw City Mill and Elevator Co. of Kaw City, Okla., has started up its new elevator at Burbank, Okla. A 15-horsepower Witte Gasoline Engine was installed by the Witte Iron Works Co. of Kansas City, Mo.

The Woodward Mill and Elevator Co. has been incorporated at Woodward, Okla., with a capital of \$25,000. John J. Gerlach, J. H. Hopkins, F. M. Cline, A. H. Morrow and R. A. O. Montgomery are the incorporators.

The Vilott-Ferguson Co. of Oklahoma City, Okla., has dissolved and sold its elevator to J. S. Herriott. Mr. Ferguson will emigrate to the Pacific coast and Mr. Vilott will remove to Blackwell, Okla., where he will engage in the grain business.

The Hayes-Shofner Grain Co. has been incorporated at Little Rock, Ark., with a capital of \$6,000, all paid, to do a general grain business. C. E. Hayes is president; Jas. Thomas, vice-president, and Price Shofner, secretary-treasurer.

F. C. Meyer & Co., dealers in grain, feed, hay, building material, etc., at Augusta, Ga., are erecting a grain elevator and warehouse at a cost of \$10,000. The building will be 88x154 feet, part of which will be one story and the remainder two stories high.

L. S. Plonsky and Donald G. Davis have sold the business of the Albany Grain Co. at Albany, Ga., to W. S. Entzminger. The new owner has taken possession and will conduct the enterprise under the style of the Albany Grain and Produce Co.,

handling produce in connection with the grain business.

The El Reno Mill and Elevator Co. has equipped its elevator at El Reno, Okla., with an improved Hall Distributor.

The grain and feed business of Brooks & Clark at Crowley, La., has been incorporated under the style of Brooks & Clark, Ltd., with a capital of \$35,000. The officers are: G. B. Brooks, president; W. E. Ellis, vice-president; L. H. Clark, secretary and treasurer.

Hughston Bros., whose corn shelling plant at Plano, Texas, was recently destroyed by fire, are erecting two new buildings, 32x44 feet and 14x60 feet, respectively, at a cost of \$8,000. The new structures will be used as an elevator and corn shelling plant.

At a meeting of the directors and stockholders of the Covington Grain and Grocery Co. of Covington, La., the old officers were re-elected as follows: President, H. J. Smith; vice-president, S. D. Bullock; treasurer, E. J. Frederick; secretary-manager, E. J. Domergue.

The elevators at Guntter and Southmayd, Texas, owned by the Brackett-Wallace Mill and Grain Co. of Sherman, Texas, have been sold by the receivers of that concern, C. C. Rountree and C. F. Gribble, to the Whaley Mill and Elevator Co. of Gainesville, Texas, for \$3,500.

The Bynum-Black Co. has been incorporated at Memphis, Tenn., with a capital of \$30,000, divided into shares of \$25 each. The incorporators are W. W. Bynum, Howell Turner, W. W. Black, J. P. Norfleet and C. M. Drow. The company will carry on a general grain and cotton-seed products business.

The Hardy Grain Co.'s new 100,000-bushel elevator at Union City, Tenn., is about completed. It is located near the company's mills and cost about \$20,000. The elevator is 114 feet high and contains twenty large bins. It is equipped with modern machinery, including a hopper scale, and will be operated by electrical power.

THE EXCHANGES

The directors of the Minneapolis Chamber of Commerce have ruled that cross trading in the pit must be discontinued.

The Minneapolis Chamber of Commerce voted recently to petition Washington officials to have only one government report on grain issued each year.

A Duluth Board of Trade membership sold recently at \$2,100, the record price. It is said that memberships are scarce, even at this price.

Henry T. Gnbbs, for many years a member of the Chicago Board of Trade and formerly connected with the grain sampling department, died on July 24.

The J. Rosenbaum Grain Co. will operate Roek Island Elevator B, at Twelfth Street and the river, Chicago, which has recently been made a regular public warehouse.

Charles H. Whitmore, third assistant secretary of the Merchants' Exchange, St. Louis, is again at work after a five months' vacation in Colorado because of ill health.

At the recent election of the Indianapolis Board of Trade, Wm. S. Gilbreath, of the Wm. S. Gilbreath Seed Co., was elected to serve a four-year term on the board of governors.

A petition, signed by 140 members of the Chicago Board of Trade, asking for the removal of the penalty clause in the rule relating to puts and calls, will be posted and come up for a vote of the members.

The Kansas City Board of Trade has adopted an amendment forbidding members from joining the bucket-shop (National) board of trade in that city and from having any business relations with that body on penalty of suspension or expulsion, at the discretion of the board of directors.

No definite action has been taken by the building committee of the Kansas City Board of Trade in the matter of securing a new building for the exchange. It was stated recently that the directors proposed assessing each of the 200 members \$500 for the purpose of raising a building fund.

Plans are being considered for a new building to be erected for the Winnipeg Grain Exchange in the course of the next two or three years. The site for the proposed structure was secured some months ago and the present talk is of a building costing not less than \$750,000. Such a building would accommodate all those engaged in the grain trade and allied lines, with room for insurance, banking and other institutions. The lease on the

present building has about three years to run, but it is confidently believed work on the new Exchange building will be commenced at an early date. The committee in charge will take up officially the question of plans.

The forty-seventh annual report of the Milwaukee Chamber of Commerce, covering the year ended December 31, 1904, and the fiscal year of the Chamber, ended April 3, 1905, as compiled by Wm. J. Langson, secretary, has been received at this office. It is a book of over 100 pages and gives the details of Milwaukee's trade and commerce for the period under review.

The rules of the Duluth Board of Trade have been amended so that trading in cash grain must be confined to the regular trading hours of the session. The amendment also provides that trading must be between members or the regular commission charges are to be collected. It is said that in the past the time of both buyers and sellers has been needlessly wasted in dickering over samples out of hours.

The Superior Board of Trade is experiencing a mild boom as the result of the passage of the inspection law and the appointment of the commission. The following have been admitted to membership: M. L. Sullivan, grain dealer, Langdon, N. D.; Hans Sorenson, miller, Lisbon, N. D.; E. Schwedler, commission merchant, Superior; M. C. Wright, broker, Minneapolis; Paul Foss, broker, Superior; Fred D. Day, broker, Omaha; V. W. McKay, broker, Red Wing; M. C. Wees, agent, Superior; George W. Barry, broker, Duluth; Frank Densmore, broker, Winnipeg; Grant Morse, broker, Sioux City, Iowa; S. H. Swan, broker, Minneapolis; F. X. Addleman, broker, Sioux Falls, S. D.; C. I. Day, broker, South Omaha; L. A. Aikin, broker, La Crosse; John I. Wilson, broker, Winona, Minn.; S. N. Swenson, broker, Minot, N. D. A number of additional applications are pending. The clearing house of the Board has been incorporated and is in working order.

Action was commenced in the County Court by the Minneapolis Chamber of Commerce on July 23 against the Edwards-Wood Co. of Minneapolis to prevent the defendant from using the plaintiff's market quotations. This suit followed closely the suit started against the defendant company by the Chicago Board of Trade in the Federal Court at St. Paul. Judge Lochren granted a temporary injunction at that time prohibiting the brokers from using the market quotations of that corporation. A number of depositions are filed with the complaint. A. D. Bradley, assistant superintendent of the Western Union Telegraph Company, deposes that the telegraph company is not furnishing the quotations to the defendant. The Minneapolis Exchange has also brought suit against the J. E. Wells Co. of Minneapolis for an injunction preventing the company from continuing its present business, which is alleged to be bucket-shopping. The suit is brought against John E. Wells, John E. Grimes and Sumner S. Johnston, doing business as the J. E. Wells Co.

The ball game between the teams from the Indianapolis Board of Trade and the Cincinnati Chamber of Commerce at Norwood Inn, Cincinnati, on July 15, resulted in a victory for the Indianapolis team by a score of 14 to 12. The Cincinnati men were good losers and after the game tendered the victors a banquet at the Business Men's Club. The line-up of the two teams was:

Indianapolis.	Cincinnati.
L. S. Hill.....	F. B.....
Raymond Daus.....	T. B.....
W. H. Howard.....	S. B.....
Norman Scott.....	P.....
E. A. Anderson.....	S. S.....
W. H. Rosenbaum.....	C.....
George Whitaker.....	L. F.....
Thomas Oddy.....	C. F.....
Bert A. Boyd.....	R. F.....
Tim Conner.....	Sub.....
Robt. Scott Jr.....	Sub.....
W. L. Wheeler.....	Sub.....
	F. M. Gale
	Charles Hill
	H. Brouse
	W. M. Mappes
	F. Guckenberger
	Ray Meyers
	Edward Terrill
	William Stueve
	Edward Dennis
	John Collins
	L. Roemer
	Frank Maguire

The new Farmers' Elevator at Red Rock, Okla., is completed.

John Spreng has completed his new grain elevator at Spreng's Crossing, Ohio, on the A. & W. Railroad.

Many are misled in basing the amount of insurance on market value instead of the appraisal value, which is the cost of material.—McCotter.

Purdue University Experiment Station is perfecting arrangements to send a "seed and sort special" lecture train through Indiana next winter and spring.

A farmer at Minot, N. D., created a sensation there by hauling into town recently a wagonload of corn raised by him on a farm near Minot. The ears were all well formed and nearly every one was ten inches or more long. The corn was solid as a rock, the cobs small and the kernels large.

COMMISSION

The McIntyre-Ingold Co. has succeeded A. H. McIntyre at Minneapolis.

L. T. Sowle of Minneapolis has bought a seat on the Duluth Beard of Trade.

W. M. Christie returned to Chicago August 5 from a pleasure trip through Scotland and North England.

A. F. Greening & Co. of Wilmington, Del., have incorporated with a capital stock of \$100,000, to deal in grain, provisions, etc.

Arthur S. Jackson, son of W. S. Jackson, president of the Chicago Board of Trade, has been admitted to the firm of Jackson Bros. & Co.

D. S. Parkhurst has bought the controlling interest in the D. E. Smith & Co. Commission Co., St. Louis, R. E. Smith, the manager, having retired.

His friends in the trade will regret to learn that death has invaded the home of J. A. Manger of Baltimore, taking away his 18-months-old daughter.

Jack Lamm, of the Lamm-McGregor Grain Co., Minneapolis, has opened an office in the Board of Trade Building at Duluth, where he will do a general commission business.

The Hubbard & Palmer Co. of Mankato, Minn., has bought two memberships on the Milwaukee Chamber of Commerce and has opened an office in the latter city, doing a general receiving business.

Charles A. Hatterscheid now represents the W. R. Mumford Co. of Chicago in Iowa, with headquarters at Corwith. He succeeds his brother, H. C. Hatterscheid, who resigned to take the position of cashier of the First National Bank at Corwith. J. J. Morris now represents the W. R. Mumford Co. in Illinois.

Memphis, Tenn., has a new grain and hay commission firm in the Bynum-Black Co., recently organized with a capital stock of \$35,000, of which \$15,000 is paid in. The officers and directors are: W. W. Bynum, president; W. W. Black, secretary and treasurer, and W. W. Bynum, J. P. Norfleet, W. W. Black, Howell Turner and C. M. Drew, directors.

The McCardle-Young Co. is the style of a new corporation organized with a capital stock of \$25,000, to do a grain commission business, with headquarters at Indianapolis, Ind. John W. McCardle of New Richmond, Ind., is president; James Hodge of Toledo, Ohio, vice-president, and Jesse Young, secretary and treasurer. Messrs. Hodge and Young are members of the United Grain Co., and are well known in the trade, while Mr. McCardle is one of the most popular grain dealers in Indiana.

It is stated that 90 per cent of the creditors of Knight, Donnelley & Co., Chicago, have agreed to accept 27 cents on the dollar in settlement of their claims. Letters were addressed to creditors recently inclosing assignment blanks in favor of the American Trust and Savings Bank and setting forth the condition of the finances in the hands of Receiver Edwin A. Potter. The statement shows that all securities sold or salable in the immediate future net between \$90,000 and \$105,000, while the liabilities of the firm exceed \$1,000,000. This suggests a settlement on the basis of from 8 cents to 10 cents on the dollar. It appears, however, that the families of the members of the firm have claims of about \$700,000 pending against the company. It is understood that George R. Thorne, father-in-law of Reuben H. Donnelley, advanced the greater portion of this amount. If all other creditors consent to waive their claims in order to permit Messrs. Knight and Donnelley to get on their feet again, the major claims of relatives will be withheld to the extent of permitting a cash settlement on the basis of 27 per cent of the claims. It is understood that the members of the firm desire to resume business, and it is stated that some creditors have been given to understand that it is the desire of these men eventually to make up losses sustained through the failure.

Grain men at Montreal complain of the port charges there for handling grain. Comparing them with New York it is said that it costs \$16.25 per 1,000 bushels to handle grain at Montreal, against about \$11 per 1,000 bushels at New York.

The Illinois Central will not in the future rely absolutely on their water pumping station, as two immense tanks, with a capacity of 50,000 gallons, have been placed on the roof of the new elevator, which are connected with the automatic sprinkling apparatus leading over the entire building.

HAY AND STRAW

Madison, S. D., reports a good hay crop.

A heavy hay crop is reported around Hancock, Iowa.

Redmon & Warren have sold their hay business at Peru, Ind.

A big hay crop is reported in the territory around Aberdeen, S. D.

A heavy crop of hay has been harvested around Harrington, Wash.

Belair, Md., advises state that a good crop of hay was harvested in that section.

Experiments with alfalfa in the vicinity of Aberdeen, S. D., are reported successful.

A report from Brule, Wis., says that the hay crop in that vicinity is very large this year.

Heavy rains practically ruined a large part of the hay crop in Allegan County, Mich.

The hay crop in the southern part of California is reported large, but only of fair quality.

Kalispell, Mont., advises state that the hay crop in that section was lighter than last year.

W. H. Barnes & Co., wholesale hay merchants of Memphis, Tenn., have moved to Neoga, Ill.

Oklahoma City, Okla., advises state that although the hay harvest was delayed the yield was good.

The hay crop, both tame and wild, around Howard, S. D., is fine as to quality and abundant as to yields.

Bardin Bros. have opened a wholesale hay and grain business in the old A. C. L. depot at Live Oak, Fla.

The August report for Missouri says that the crop of clover hay is considerably below that of last year.

The hay shed of the Baltimore & Ohio Railroad Co. at Baltimore, Md., is reported burned, with a loss of \$10,000.

Army worms are reported to have done extensive damage to timothy fields in the territory around South Bend, Ind.

The hay crop around East Lyme, Conn., is reported good in general, and quite equal to the average as to quality.

A late report from Pittsburg, Pa., says that hay continues in fair demand on that market, as receipts are not heavy.

Rains did some damage to the hay crop in British Columbia before it was under cover. The yield is below the average, due to a dry spring.

The alfalfa crop in Nebraska is said to be one of the heaviest in the history of the state. The season has been very favorable and the yield is large.

A farmer near Reardan, Wash., has been successful in growing Turkestan alfalfa without irrigation. He secured a yield of three tons to the acre on the first cutting.

A good yield of hay of good quality is reported at Anacortes, Wash. Clover is the principal hay crop there. Rains did a little damage to the hay on the flats.

Some new hay has been coming in at Saginaw, Mich., and is bringing a fair price, considering its appearance. A local paper says it has "a swampy sort of a look."

J. E. Crane, hay, straw and produce shipper at Eaton Rapids, Mich., has taken his brother, A. Crane, into partnership. The firm name is now Crane & Crane.

The Woolsey & Stahl Hay Co. will erect an alfalfa meal mill, to cost \$10,000, at Second Street and Nebraska Avenue, in Kansas City, Kan. It will be the first plant of its kind in that city.

W. E. Tuttle of Springfield, Ohio, has begun the erection of a hay warehouse, 68x74 feet, on property across the road from the elevator and office. The warehouse is to be used for general storage and local trade.

A shipper at Utica, Ohio, says fields through that part of the state which produced No. 1 timothy hay last year won't run over one-fourth timothy this year, owing to the prevalence of volunteer clover and white top weeds.

The E. L. White Co. has been incorporated at Woonsocket, R. I., with a capital of \$10,000 to do a wholesale and retail business in hay, grain, fuel, etc. The incorporators are: Ernest L. and Albert E. White and Miles Logan.

According to a recent crop report, the Michigan hay crop this year is generally heavy. The early cut was somewhat damaged, but more favorable weather the middle of July resulted in a large amount of good hay being secured. Reports from

western Michigan counties show hay damaged in central counties, but good north and south.

A recent report from the Bureau of Crops and Weather at Des Moines, Iowa, states that the early cutting of clover hay in that state was badly damaged by the heavy rains. On the whole, a full average hay crop was harvested.

A report from Sacramento, Cal., states that the hay crop in the Sacramento Valley is larger than usual and the quality excellent. Hay baling is in progress. Taken as a whole, the hay crop of the state is the best in several years.

The Saginaw Milling Co. has converted the building in Saginaw, Mich., formerly occupied by the Michigan Dairy and Salt Co., into a modern hay warehouse. Machinery for handling baled hay has been installed. The warehouse has a capacity of 150 carloads.

A report from Missoula, Mont., states that the yield of hay in the Bitter Root Valley and throughout all of Western Montana is generally reported heavy and of good quality. The quality and yield are better than was anticipated after the unfavorable weather last spring.

A press report from La Crosse, Wis., under date of July 27, says: "Five thousand tons of wild hay will be lost in this vicinity this season as a result of extreme and continued high water. Hundreds of acres of hay lands are submerged and there is no possible chance for a hay crop."

The elevator in Winchester, Ind., recently purchased by the Goodrich Bros. Hay and Grain Co. has been moved from its former location to a site adjoining the company's hay sheds. The elevator will now be enlarged to provide more bin room and new machinery will be put in.

The Canada Hay Co., Ltd., has been incorporated at Montreal, Que., with a capital of \$49,900, divided into shares of \$100 each. The directors are: Napoleon Allard, J. A. Dupuis, A. Fontaine, S. Vessot, W. Copping and J. J. Trickey. The company will handle hay and other farm products.

The hay crop in the New England states is heavy this season. In Connecticut the yield and quality are greatly above the average. One farmer near Higganum secured 58 tons from eleven acres cut the latter part of June. From all sections of Maine the reports are of a good yield of excellent quality.

The Pittsburg Hay Reporter has the following on the Western hay crop: "Iowa in all portions reports heavy hay crop, with a quantity spoiled by rain and at some points 10 per cent left standing and bulk of yield harvested. Reports from Wisconsin and other states are similar to those above quoted, with the possible exception of Kansas, which reports light yield of timothy and half yield of prairie hay."

The Hay, Grain and Feed Teamsters' Union of Chicago has demanded of the Chicago Feed Dealers' Association an increase of wages from \$14.50 to \$15 per week for 600 drivers. The present agreement between the teamsters and the feed dealers expires on August 25. The teamsters now receive full pay for every day whether the employers keep their teams busy hauling or not, and overtime pay for all holiday work.

The Minneapolis Record, in a recent issue, says: "Present conditions indicate a very good crop of hay in most states, though it is yet too early to say that the crop will equal the largest crop raised. Minnesota too rank; Iowa full average; South Dakota good; North Dakota good; Nebraska heavy, but some damage by rain; Michigan large, haying backward; Oklahoma good; Wisconsin very large; Ohio and Western Central States harvest late, but very large; New York fair."

The yield of hay in Berkshire County, Mass., is reported to have been one of the best in years, both as to quality and quantity. There is said to be still a large amount of old hay on hand in that section, and it is predicted that good hay will be cheaper in price the coming winter than for some time. Rye is also reported a good crop in that county, and the straw is long and heavy. A year ago bright rye straw in the local markets was worth about \$24 per ton. The price now, on account of the prospects for a large crop of new straw of good quality, is about one-half what it was a year ago.

T. D. Randall & Co., Chicago, report August 11: Receipts of hay and straw to-day 48 cars. While quotations are practically unchanged, there is not the activity in the market that we would like to see. Trade is only buying what they actually need for their daily use. The general feeling is that the market will ease off. The demand for old Timothy not as active as it has been. Choice selling at \$12.50 to \$13, sparingly at \$13; No. 1, \$11 to \$12; No. 2, \$9.50 to \$10.50. Lower grades, \$7 to \$9. New timothy hay, \$10.50 to \$11; No. 1, \$9.50 to \$10. Lower grades, such as heavy mixtures or hay that is out of condition, at \$6 to \$8.50. Kansas and Indian Territory prairie hay is also slightly easier, choice selling at \$10; No. 1, \$9 to \$9.50.

Lower grades, \$8 to \$8.50. Iowa, Minnesota and Nebraska prairie hay, \$9 to \$9.50; No. 1, \$8 to \$8.50. Lower grades, \$6.50 to \$7.50. Illinois, Indiana and Wisconsin feeding prairie hay, \$7 to \$7.50. Packing hay, \$5.50 to \$6. Rye straw continues in liberal supply. Choice selling, \$6 to \$6.50. Oat and wheat straw, \$5 to \$5.50.

Advices from various sections of North Dakota are as follows: Courtney: A bumper hay crop.—Ray: A rather light crop. The cool, backward spring and light snowfall last winter is blamed.—Jamestown: Hay that was down during the heavy rains was badly damaged.—Clare: Plenty of hay.—Bismarck: Hay heavy and of fine quality.—Lansford: Quality and quantity excellent. Some sections of North Dakota report damage to the crop on account of the heavy rains. The haying season in that state extends from July 1 to September 1, large quantities of wild hay being harvested, as well as the tame grasses.

According to a report from Augusta, Ga., that city is now leading all the cities of the Southeast as a hay market, of local raising. Annually over 70,000 bales of hay are raised in that section and marketed in that city. The lowlands of the Savannah Valley are fast being converted into hay farms. The land is especially adapted for the growing of forage, and from three to four crops are harvested each spring and summer. It is of excellent quality and finds an easy sale. The biggest portion of the crop is used locally, although the shipments to the lumber districts of Southeast Georgia are increasing annually and now are one of the leading exportations of the city.

The St. Louis Hay Exchange Warehouse at Theresa Avenue and the Missouri Pacific tracks in St. Louis, Mo., was burned on the evening of July 17. The sixty carloads of hay stored in the building were owned by various commission men and are said to have been fully insured. The loss on the building itself is estimated at \$10,000, partially covered by insurance. The fire occurred at 5:15 o'clock p. m., and is said to have been started by sparks from a switch engine. The fire had gained so much headway before being discovered that the building collapsed before the fire department arrived. The hay warehouse of James F. Quinlivan & Co. on the opposite side of the street was saved with difficulty.

The Iowa Agricultural Union of Ames, Iowa, through the secretary, Prof. G. I. Christie, has just completed the work of sending out a large quantity of alfalfa seed to various members throughout the state. The work was begun last spring, when sufficient seed to sow one-half acre of ground was furnished to forty farmers. The seed was sown in April and a record kept of the performance of the crop. At this time over forty-five of the men have reported that they have an excellent stand of alfalfa and are sure that the crop will be a success in their community. To compare the spring seeding with fall seeding, enough seed to sow half an acre of ground adjoining the land sowed to alfalfa last spring is being furnished for August seeding.

A. J. Baumgarten, a hay dealer of Baraboo, Wis., is quoted as follows by a Duluth paper concerning the hay crop: "One of the largest hay crops ever grown in the middle West has been harvested this year. The grass in many places has been almost too heavy, requiring repeated spreading before it could be properly cured on the field. Clover in many cases has grown so rapidly and reached such large size that it will be comparatively coarse and tasteless. The tonnage, however, will be exceptionally large. There has been much experimenting with alfalfa during the last year or two and in some cases its culture has proved a decided success. The chief difficulty is in securing the first seeding, but after that has been accomplished the crop is usually good."

R. F. Morrow Commission Co., August 12, say: "Our hay market for the past week has not been very favorable for the hay shipper; arrivals have not been large and the demand has been light. There is quite a little hay on the market to-day remaining unsold, most of it being medium grade timothy and prairie. Arrivals of old timothy have been light, with a fair demand for the best grades. The trade will probably use old timothy for some time yet, as the large consumers do not take favorably to new hay. Prices are a trifle higher than they have been and the outlook is for old hay to sell still higher. Arrivals of new crop timothy are lighter than they have been, and where it comes through in good shape meets with a ready sale, but a large percentage of it is arriving out of condition. Such hay it is impossible to dispose of at anything like reasonable prices. Shippers can't be too careful in shipping new timothy. They should see to it that the bales are pressed very light, and placed on end when loading in car; in no case should the bales be placed flat. It will not pay shippers to send in the poorer grades of new timothy, as the trade wants only the better grades. Considerable Kansas prairie hay is arriving out of condition; the receipts are not large and there is

a very light inquiry, as the trade seems to be afraid to take hold of this hay. When the market is at a low point, it is customary for large consumers to buy in a considerable amount of it and store it for future use at times when the market is considerably higher. This year there is no demand for Kansas hay for this purpose, the trade taking only what is required for present use. The straw market is very quiet; prices have been very low the past few days and receipts are considerably lighter. There is a trifle better feeling; still we can't say there has been any advance in prices. However, the trade seems to think prices are as low as they are going. They are beginning to take hold better and are putting in some at present prices. Quotations are: Old timothy—Choice, \$13@13.50; No. 1, \$11.50@12.50; No. 2, \$10@11; No. 3, \$8@10. New timothy—Choice, selling as high as \$11; No. 1, \$10@10.50; No. 2, \$8@10; choice Kansas prairie, \$10; No. 1, \$9@9.50; old Kansas prairie hay not wanted. Iowa and Nebraska choice upland prairie, \$10; medium grades, slow sale at \$7@9."

H. H. Freeman & Co., Chicago, report August 12: Timothy—Market active with receipts light. Buyers anxiously looking for good hay. Old hay is receiving the preference, although a good grade of new hay could be sold to advantage. It is but a few days before new cured hay will be on our market and we caution holders of old to ship the same at once. Demand is strong now and it sells at a premium; later on it will sell at a discount from the new. You cannot afford to wait longer; ship now and we feel positive you will have no reason to regret it. Prairie—Market quiet and steady. A good demand prevails for all good hay. Kansas offerings moderate. State hay light. No western hay is as yet moving. Demand for old hay has fallen off and the only call for it now comes for either cattle feeding or packing hay purposes. Prevailing prices are fairly good and advantage should be taken of present good market by letting shipments come forward at once. Straw—Market unchanged and steady. Receipts seem to be decreasing and a better, more steady market will prevail. Railroad yards are getting cleaned up of the big stocks which came in and have been stored away for future use.

Reports from various parts of Minnesota concerning the hay crop of that state are as follows: Blooming Prairie: A good hay crop was harvested.—New Ulm: The hay crop will be short on account of the flooding of the bottom lands, due to the heavy rains. The crop on the high land in this section is exceptionally good, but the greater part of the wild hay is on the bottoms and cannot be harvested.—Lindstrom: One of the largest hay crops in the history of Chisago County. Good growth of clover, timothy and wild hay.—St. Paul: The low lands along the Mississippi River, thousands of acres of good meadow land, were flooded in July, making it impossible to get a crop, and the river has since been high for so long that the growing grass has been converted into seaweed. Coming so late in the season, the second crop will be light.—Angus: Crop not as heavy as expected. About one-half that of last year. Cold weather early last spring, followed by the heavy rains, is responsible for the shortage.—Red Wing: Large crop: Hay crop was so heavy in some fields that it was badly down and could not all be cut; so full of sap and lay so thick in the windrows that it was difficult to cure. Haying weather was very unfavorable.

Concerning the hay crop, the Orange Judd Farmer of July 29 says: "The season for the Western hay crop has been reasonably good, and the result is a yield rather above the normal. There are exceptions, however, and in some rather important districts the situation is not as good as last year, nor as good as was expected earlier. In portions of Kentucky, in southern and part of central Illinois, in Missouri and in portions of the Pacific coast, there was some lack of rainfall during the early part of June, which resulted in materially lowering the promise of the hay crop in those districts. Elsewhere there was more than ample rainfall, and a rank growth of grass results. Taken as a whole, however, the crop should more than equal last year. In the Northwest, and in portions of the Trans-Missouri country, the larger part of the hay crop consists of wild or natural grass cut in natural meadows. In the districts of this class hay furnishes the bulk of the crop. There has been entirely too much rainfall, and while there is a good growth of grass, much of it will not be saved. Sloughs were full of water at time of harvest, so that not only will it be difficult to get the grass properly cut, but the hay is apt to prove coarse and unsatisfactory in comparison with drier years."

MICHIGAN HAY CROP, 1905.

The hay crop in Michigan this year is badly damaged, owing first to excessive rains and later to the neglect of timothy meadows on account of the urgency of the grain harvest. The first cut of

hay, according to reports handed in at the hay conventions at Toledo and at Jackson is unfit even for feeding purposes. Possibly 20 per cent of the crop is a total loss. The remainder is mostly mixed with clover, and what timothy there is seems to have been cut too late. Shippers say there will be no choice or No. 1 timothy and but little No. 2, and that commission men will have to accept and sell hay with some clover in it this season.

BALING HAY ON THE FARMS.

A few years ago it was not an important thing for a farmer to bale his own hay before sending it to market. In fact, there was no special inducement for doing this. Loose hay sold just as freely as baled and brought just as much money. The grower argued that it was a useless expenditure of time and money to bale his hay unless it had to be shipped in railroad trains or on boats. Then, of course, it was necessary to reduce the bulk. The grower also considered the buying of the baler and the hiring of the work done was an unnecessary expense. He even preferred to let his hay remain in stack during the fall and winter, forgetting that a considerable percentage was damaged or entirely ruined by the wet weather or windstorms, says the Orange Judd Farmer.

Of late years conditions have changed considerably. In many markets loose hay cannot be sold at all, while baled hay brings a good figure. This does not mean that loose hay is valueless, but it does mean that buyers insist that the producer bale his hay before taking it to market. In most places loose hay sells readily enough, but is quoted from \$1 to \$2 per ton cheaper than hay which has been baled, so that for the farmer who has hay to sell, baling is absolutely necessary.

A good baling machine will pay for itself in a short time. By increasing the value of hay from \$1 to \$2 per acre, any man with a good-sized hay farm can more than pay for his machine in one year. Then he will always find plenty of work to do for his neighbors, so he will make considerable clear money.

The fact is that where a farmer has considerable hay, it will pay him to bale it for his own use alone. The bulk is so reduced that it all can be stored in a barn. Without baling it will have to be stacked out of doors, which lessens its value from 5 to 20 per cent. Baling of hay may begin at any time after the crop is cured.

In dry climates, great quantities are baled directly from the windrow. This is especially true of timothy. The baling machine is taken to the hay field, the hay is brought to it with great horse rakes and it is put directly into the machine. It should be pretty well cured before baling, else there is a possibility of molding. A precaution to be observed is that it is to be dried out pretty thoroughly; don't attempt baling while dew is on or the hay wet.

A great many farmers in Illinois and states farther south cut their clover, allow it to wilt slightly and then bale while yet green. They claim clover cures thoroughly and comes out as good, succulent feed. While this journal does not advise a general adaptation of this method, the fact is it has been practiced successfully.

FARM VALUE OF THE HAY CROP.

Hay will probably return this season to its place as second in volume and value of all the crops of the country, cotton returning to third place, as customary, corn occupying the lead. It has justly been said that, while hay is but secondary in importance in the West, it is the real foundation crop of New England and the Eastern states. New York is the greatest producer, but New England, and especially Rhode Island, is the most liberal buyer, at least so far as price is concerned. Pennsylvania is next to New York as a hay grower, and is followed by Iowa, Ohio, Michigan, Illinois and Missouri. The territory of Arizona takes the lead, however, as to yield per acre, reaching three and a half tons of alfalfa, against an average of only 1.43 tons for the rest of the nation. This is very low, considering that the average price for the country for the last five years has been \$9.13, while in New Hampshire the average was \$13.49, in Rhode Island \$17.38 and in Connecticut \$14.89.

Without doubt, it would pay farmers in those sections where the markets are especially favorable to devote more attention to the hay crop. In New England and the East there are thousands of acres which can be drained and made equal to the best unirrigated hay lands anywhere; yet lands there, which might produce \$15 hay and as much of it as any land, are neglected, while Western land is being reclaimed at great expense, although it produces a hay crop that brings in those markets only \$7 to \$10 per ton.

The hay crop is one of the most reliable that can be grown. On land suitable for the purpose and properly managed, a fair crop is nearly always secured and with less labor and less expense than

any other of the standard products. It is commonly said that hay is an exhaustive crop if sold from the farm, but modern methods of replacing lost fertility by top-dressing with chemicals have resulted in certain instances not only in maintaining the condition of the soil for an ordinary working lifetime, at least, but actually in improving its productiveness, notwithstanding the yearly removal of about two to three tons of high-grade hay.

In the days of high-priced labor, a crop which regularly gives so much cash value for so little labor deserves very particular notice, says the American Cultivator. Even a neglected hay field pays better than other crops under like conditions, while if managed by a thorough and businesslike man its steady average income is assured so long as seedtime and harvest, spring and summer do not fail.

PERSONAL

George Groehler is now buyer at the Orwoll Elevator in Clarkfield, Minn.

P. J. Gjertson has taken charge of the Christensen Elevator at Madelia, Minn.

A. C. Curtis is now in charge of the elevator and lumber yard at Lockhart, Minn.

Joe Mandt of McIntosh, Minn., has taken charge of an elevator at Edinburg, N. D.

John Coffin has succeeded Al. Hill as manager of the elevator at Charlottesville, Ind.

George McAllister is now manager of the Hoit Grain Co.'s elevator at Marietta, Minn.

John Cavenagh has taken a position with the Heising Elevator Co. at West Hope, N. D.

M. McGlin of Fulda, Minn., will have charge of McGlin Bros.' elevator at Lakefield, Minn.

A Mr. Grimsgard has taken charge of the St. Anthony & Dakota Elevator at York, N. D.

John C. Walters will buy grain for the Amenia Elevator Co. at Everdell, Minn., this season.

Hal Rowe has taken charge of the St. Anthony & Dakota Elevator Co.'s house at Ada, Minn.

J. R. Lukes of Myrtle, Minn., is now in charge of an elevator and lumber yard at London, Minn.

Karl A. Hansen has accepted the position of manager at Bingham Bros.' elevator in Tyler, Minn.

J. C. Minert of Holloway, Minn., has taken charge of the Inter-State Elevator at Bellingham, Minn.

Ed. Hammond of Wheaton, Minn., will have charge of the Monarch Elevator at Dumont, Minn.

Fred W. Meader of Hesper, Iowa, will take charge of an elevator at Brinsmade, N. D., September 1.

R. T. Reine will have charge of the Osborn-McMillan Elevator Co.'s elevator at Brooten, Minn.

Will Carsten of Taunton, Minn., has taken charge of the Marshall Milling Co.'s elevator at Gary, Minn.

J. R. Balding of Trenton, Neb., is now manager of the Duff Grain Co.'s business at Indianola, Neb.

H. E. Reginer has accepted the position of manager for the Western Elevator Co. at Ghent, Minn.

Claude Parks of Cyrus, Minn., has taken the position of wheat buyer at an elevator in Wadena, Minn.

M. F. Birdseye of Dumont, Minn., is now wheat buyer for the Monarch Elevator Co. at Wheaton, Minn.

Thomas Martin of Sedan, Minn., will have charge of the Woodworth Elevator Co.'s house at Kensington, Minn.

Daniel Clark of Welcome, Minn., has taken charge of the Skewis-Moen Grain Co.'s elevator at Rileigh, Iowa, as buyer.

H. S. Anderson has moved from Herman, Minn., to Havana, N. D., where he has taken a position as grain buyer.

Thomas Donahue takes charge of the Andrews & Gage Elevator on the N. P. at Breckenridge, Minn., the middle of this month.

J. W. Wolf of McPherson, Kan., has taken charge of the elevator at Langdon, Kan., owned by the Hoffman & Sons Elevator Co.

Frank Finnigan, for three years manager of an elevator at Stewartville, Minn., has taken a similar position at Newburg, N. D.

W. J. Blackmun of Comfrey, Minn., has accepted the position of buyer at Mapleton, N. D., for the Amenia Elevator Co. of Duluth.

George Rau of Wykoff, Minn., has accepted the position of buyer for the Imperial Elevator Co. at a station near Devils Lake, N. D.

Ed. Rau, who has been superintendent of the terminal elevators of the Hyde Elevator Co. at La Crosse, Wis., for the past two years, has accepted a similar position with the D. Rothschild Grain Co.

at Davenport, Iowa. Mr. Rau will have special charge of the barley department.

A. A. Sorrenson, who has been grain buyer at the Cargill Elevator in Houston, Minn., has been transferred to Albert Lea, Minn.

C. A. Tubbs, for the past two seasons agent for the Cargill Elevator Co. at Galesburg, N. D., has been transferred to Hunter, N. D.

G. W. Murfin has given up the management of the Hill Elevator at Grey Eagle, Minn., and returned to his home in Minneapolis.

H. G. Schimming has taken the position of grain buyer for the National Elevator Co. at Wheaton, Minn. He was formerly at Clinton, Minn.

George L. Beck of Brownsdale, Minn., has removed to Claremont, Minn., and will have charge of the Western Elevator Co.'s new house.

M. L. Wahlert has been appointed manager of the D. Rothschild Grain Co.'s elevator at Hardwick, Minn., succeeding H. T. Halverson.

Frank T. Nelson has succeeded C. L. Ward as buyer for the Northwestern Elevator Co. at Litchfield, Minn. Mr. Ward goes to Appleton, Minn.

Earl Scott, for the past two years in charge of an elevator at Bertha, Minn., has taken a similar position at Grey Eagle, Minn., at a larger salary.

D. Klumpers of Ripon, Wis., has accepted the position of foreman in an elevator at Appleton, Wis., owned by the Wisconsin Malt and Grain Co.

N. J. Steffen of Hastings, Minn., has been appointed manager for the Minnesota & Western Grain Co. at an elevator in Pipestone County, Minn.

G. A. Skewis of Terril, Iowa, has removed to Estherville, Iowa, where he will have charge of the new cleaning station for the Skewis-Moen Grain Co.

Walter Brewster has taken the position of grain buyer for the S. D. Grain Co. at Woonsocket, S. D. James Fish succeeds him at the Brewster Flour Mill.

J. A. Bailey of Graceville, Minn., has taken the position of manager of the Miller Elevator Co.'s Elevator A at Hastings, Minn. He succeeds R. W. Freeman.

George Reginer, for six years in charge of Bingham Bros.' grain elevator at Taunton, Minn., has taken a position with the Heising Elevator Co. at Omamee, N. D.

T. H. Kavanaugh, until recently wheat buyer for the W. J. Jennison Co. at Appleton, Minn., has removed to Dresden, N. D., where he will buy grain for the National Elevator Co.

G. A. Sammis of Le Mars, Iowa, who has been working Iowa territory for the Updike Grain Co. of Chicago, has been transferred to Nebraska territory, with headquarters at Omaha.

Paul Smith of Lincoln, Ill., has been selected as buyer and manager for the Lincoln Grain Co.'s business at Lawndale, Ill., succeeding John Hilrichs, who will engage in business for himself.

J. B. Zimmer has resigned as wheat buyer at the Oscarson Elevator in White Rock, S. D., to take a similar position with the National Elevator Co. at the same place, succeeding J. A. Lindgren.

A. N. Cook has resigned as agent for the St. Anthony & Dakota Elevator Co. at Willow City, N. D., to engage in the grain business for himself at Bantry, N. D. He is succeeded at Willow City by Garfield Crites.

T. J. Tradewell, for the past year with the Pacific Elevator Co. at Winthrop, Minn., has removed to Fairfax, Minn., where he will have charge of that company's elevator. A. J. Rignell succeeds him at Winthrop.

D. L. Paullin, a well-known grain merchant of Dayton, Ohio, has bought the half mile race track at the fair grounds at Jamestown, Ohio, including twenty-eight acres of ground, and will maintain it for the benefit of local horsemen.

N. G. Backstrom has resigned as buyer for the St. Anthony & Dakota Elevator Co. at Warren, Minn., to accept a similar position with the Spaulding Elevator Co. at Alvarado, Minn. John E. Olson of Alvarado is Mr. Backstrom's successor at Warren.

E. W. Potter of Leslie, Mich., is now manager of the 15,000-bushel grain elevator at that place owned by McLaughlin, Ward & Co. of Jackson, Mich. Mr. Potter will continue his hay and produce business on his own account in connection with the elevator business. He succeeds D. C. Morea.

John H. Lee, who has been in charge of the Great Western Elevator Co.'s house at Fairfax, Minn., for the past three years, has been transferred to Franklin, Minn., instead of North Dakota, as was expected. Mr. Lee will succeed James O'Hara at Franklin, and the latter relieves William Smith at Boyd, Minn. Mr. Smith, in turn, succeeds Mr. Lee at Fairfax.

Nebraska winter wheat is said to be grading very high.

BARLEY AND MALT

The barley crop around Lidgerwood, N. D., is much better than the average and promises a large yield.

United States letters patent No. 794,313 have been granted to William P. Rice of Chicago, Ill., on a malt-house and malting apparatus.

The Niagara Falls Brewing and Malting Co. has been incorporated at Niagara Falls, Ont., with a capital of \$100,000, to carry on a general brewing and malting business. The provisional directors include G. G. Durham, James Bampffield and J. J. Bampffield.

By an unanimous vote the board of health of Seattle, Wash., on July 27 decided to recommend to the health and sanitation committee of that city that the new milk ordinance contain a provision prohibiting the use of malt, or brewer's grain, as feed for dairy cattle from which milk is taken for sale in that city.

The Canadian Malting Co. has decided to establish its Western branch in Winnipeg, Man., and has taken out a license to do business in that province. A site for the malt house, comprising three acres, has been purchased at a cost of \$10,500 and plans for the buildings have been prepared. Work will shortly be commenced.

The old Queen City malt house and adjoining property in Buffalo, N. Y., once owned by John B. Manning, has been purchased by the C. G. Curtiss Co. and S. K. Nester, each taking one-half of a strip about 700 feet long on the canal, at the foot of Auburn Avenue. Both parties are said to intend erecting malting plants on the site.

The report on barley, made at the district meeting of the Tri-state Grain Dealers' Association at Mitchell, S. D., on August 3, was to the effect that the berry is somewhat discolored. This will have a tendency to lower the grade and affect the price, although by careful stacking it was thought the grain would bleach to some extent. The yield will be heavy in that territory.

The first car of new crop Minnesota barley sold in the Minneapolis market was taken by Ely Bernays, the New York exporter. The grain arrived July 27 and came from Northfield, Minn. It was consigned to the Calumet Elevator Co. and graded No. 4, selling at 41 cents per bushel. The Minneapolis Journal has the following concerning the transaction: "The presence on 'change here of Mr. Bernays, and his purchase of the first of the new stuff to move, occasioned some comment as to the probability of a big export trade this year. Much will depend upon the competition of Russia, but if an export price basis can be reached that will permit American exporters to compete, a large business will follow with Minneapolis as point of origin."

Stockholders of the American Malting Co. have formed a committee for the purpose of readjusting the capitalization of the company. Under the proposed plan the capital is to be \$15,000,000. The stock is to be divided and distributed as follows: Preferred stock, having a preference as to assets as well as dividend, dividend rate to be limited to 4 per cent for two years and 6 per cent thereafter; cumulative from October 1, 1905, dividends payable semi-annually, to be issued in exchange for the existing preferred stock at 62, \$8,952,800. Common stock to be issued in exchange for existing common stock, at 44, \$5,896,000—a total of \$14,848,800. The remainder of the capital stock, \$47,200 of preferred and \$104,000 of common, is to remain in the treasury. The plan has been approved by the board of directors and by the holders of a large amount of each class of the stock, and the committee has been requested to carry the plan into effect under an agreement dated July 6, 1905, which is on deposit with the Standard Trust Company of New York. The committee has agreed to act without compensation, and is as follows: J. G. Jenkins, Michael Coleman, Louis L. Stanton, Wilberforce Sully, Marshall S. Driggs, Henry DeCoppet, R. C. Martin.

PACIFIC SLOPE BARLEY.

Washington is the leading barley state of the Pacific slope, according to government statistics, which give the following statement of barley production in 1904:

	Acres.	Bushels.
Washington	122,298	3,461,056
Oregon	60,375	1,515,150
Idaho	32,798	696,214
Montana	22,848	844,140
Wyoming	1,225	29,690

As famous a brewing barley as is grown in America is that of the Gallatin Valley of Montana, whose

yield is largely taken by German maltsters. The county in 1904 grew 679,530 bushels on 16,458 acres.

BARLEY RULES CHANGED.

The Illinois State Grain Inspection Department gives notice that, effective August 25, 1905, the rules for the inspection of barley have been changed to read as follows:

"Rule 8.—Feed Barley—Must test not less than forty (40) pounds to the measured bushel, must be cool, reasonably sweet, and reasonably free from other grains and seeds, and not be good enough for No. 4.

"The grade known as 5 Barley will be eliminated and in its place a grade of Rejected Barley established.

Rejected Barley—Shall include all barley which is badly damaged or from any cause unfit for malting purposes and not good enough to grade Feed Barley, except that Barley which has been chemically treated shall not be graded at all.

IMPORTS AND EXPORTS OF BARLEY AND MALT.

Imports—	Bushels.	Value.
June, 1904	21	\$ 19
June, 1905	10	10
Twelve mo. end. June, 1904...	90,708	45,245
Twelve mo. end. June, 1905...	81,020	39,546

Exports—	Bushels.	Value.
June, 1904	121,779	69,267
June, 1905	453,742	223,269
Twelve mo. end. June, 1904...	10,881,627	6,292,914
Twelve mo. end. June, 1905...	10,661,655	5,585,544

BARLEY MALT.

Exports—	Bushels.	Value.
June, 1904	33,937	24,474
June, 1905	41,843	29,981
Twelve mo. end. June, 1904...	438,580	315,676
Twelve mo. end. June, 1905...	487,158	342,851

NEW BARLEY CROP ESTIMATES.

E. P. Bacon & Co., Milwaukee, give a summary of 350 replies received by them from points in the barley producing sections of the Northwest as to the outturn of the new crop:

WISCONSIN.—Some gain in production as compared with the past two years, due to a slight increase in acreage and somewhat larger yield per acre. The quality averages good, but uneven, and not equal to last crop; the crop is nearly all good malting quality; color uneven, depending upon harvest conditions mainly, but the larger part is discolored and much of it very badly.

MINNESOTA.—Reports variable and indicate a decrease in production as compared with last crop due to smaller yield and slight shrinkage in the acreage; the quality averages inferior to last crop and ranges from "feed barley" to choice malting. The larger percentage may be classed as low malting; color reports indicate that practically all is discolored by unfavorable weather; only a few report no damage in this respect.

IOWA.—Considerable decrease in production as compared with last year, due to shrinkage in the acreage and smaller yield per acre. The quality is very uneven, ranging from "feed barley" to choice malting. A large percentage is "feed barley" quality, but there is a larger percentage suitable for malting than last crop. The color is uneven and practically all is more or less discolored, four-fifths of all the reports being to that effect.

SOUTH DAKOTA.—About the same production as last crop. The quality is not as good as last crop, there being a larger percentage of shrunken and blighted barley, due to unfavorable weather. About one-half of the reports indicate damage of this kind. The color is uneven, but the larger part of the crop is more or less discolored, only 25 per cent reporting to the contrary.

NEBRASKA.—Reports are less favorable than last year. There appears to be a smaller production, due to decrease in acreage and smaller yield per acre. The quality ranges from "feed barley" to fair malting, but mainly the former, due to damage by unfavorable weather. The color is uneven, the reports being about evenly divided on this point.

The short crop of wheat of this season in Mexico and a reduction of 70 per cent on the duty has opened up that market to a certain amount of American wheat. Monterey seems to be the Mecca of dealers' agents.

C. A. Jordan's 14-acre oats field in Dix township, Ford County, Ill., yielded him 1,420 bushels this season. This is an average of over 101 bushels per acre and is the largest yield reported in Central Illinois this season.

It is estimated that it will require 250 average-sized grain ships to move the grain crop out of the Pacific Northwest during the season of 1905-06, unless European market conditions induce growers to keep their stocks at home.

SEEDS

F. J. Gittings has succeeded Requa & Co. in the seed business at Neosho, Mo.

The Shugart & Ouren Seed Co. of Council Bluffs, Iowa, has incorporated under the same style.

New cleaning and elevating machinery has been installed in C. D. Burchard's seed warehouse at Plainview, Minn.

The Daniels Linseed Co. of Minneapolis, Minn., has changed its corporate name to the Archer-Daniels Linseed Co.

The American Seed Co. has been incorporated at Fort Worth, Texas, with a capital of \$15,000. T. W. Labatt, A. E. Bell, M. A. Benton and F. M. Bell are the incorporators.

Seed men report that practically every sample from the new timothy crop is poor color. This is true, not only from the districts that had rain after haying, but from others as well. The seed was evidently stained during growth.

C. C. Norton, who has been engaged in the seed and grain business at Greenfield, Ohio, for the past thirty-seven years, will retire from business on September 1. He will be succeeded in the business by his sons, E. J. and F. W. Norton.

The wholesale seed warehouse of the Barclay-Bessonette Co. at Temple, Texas, was recently badly damaged by fire of unknown origin. The loss on stock is estimated at \$1,000, covered by insurance. The building is owned by J. L. Brannon of Forney, Texas. His loss is \$500, also fully insured.

F. E. Winans, Chicago, says of the outlook August 12: "The new crop of timothy seed is about a week to ten days late in starting. Reports generally indicate a light yield. Trading thus far has been confined to new crop futures which have shown an advancing tendency. September timothy seed quotable at \$3.52½; October, \$3.50; March, \$3.60."

The Ohio Valley Seed Co. of Evansville, Ind., has removed from its former quarters to a four-story brick building at 513-515 Sycamore Street, that city. The company, which has been under the management of Louis Graf for the past five years, has outgrown its old quarters. A wholesale and retail seed business in all its branches is conducted by the company.

June exports of flaxseed amounted to 12 bushels, valued at \$15, as compared with exports of 4 bushels, valued at \$7, for the preceding June. For the twelve months ending with June 1,338 bushels of flaxseed, valued at \$1,738, were exported, as compared with 758,379 bushels, valued at \$820,668, for the corresponding period ending with the preceding June.

Imports of flaxseed for the month of June amounted to 306 bushels, valued at \$379, as compared with 189,257 bushels, valued at \$170,583, for the preceding June. The total imports of flaxseed for the twelve months ending with June aggregated 296,184 bushels, valued at \$318,687, as compared with 213,270 bushels, valued at \$201,224, for the twelve months ending with the preceding June.

The Minnesota Seed Co. has been chartered at New Ulm, Minn., with a capital of \$50,000. The incorporators are Fred Meier of Sleepy Eye, Minn.; J. L. Schoch, Ferdinand Crone, Jacob Klossner Jr. and Conrad H. Dirks, all of New Ulm. The contract for the erection of a three-story seed warehouse, 40x80 feet, has been let. It will be built of cement bricks and will be lined with clay bricks. The warehouse will cost about \$10,000 and will be equipped with cleaning, handling and drying machinery.

The Thompson Seed Co. has been incorporated at Albert Lea, Minn., with a capital of \$75,000. The stock is divided into \$35,000 of preferred and \$40,000 of common. The common stock to the amount of about \$35,000 has been subscribed. Of this \$10,000 is held by Orville C. Thompson, the promoter of the enterprise. The remainder is mostly held by local business men and farmers. The headquarters of the company are at Albert Lea and arrangements have been made for the erection of a two-story-and-basement brick and stone warehouse, about 40x80 feet in dimensions. It will be located between the tracks of the C., R. I & P. and the C., M. & St. P. railways, and will cost about \$7,000. The seed business at Farmington, Minn., established by Mr. Thompson and heretofore conducted by him, will be continued as a branch of the Albert Lea establishment. The directors of the new company are: O. C. Thompson, Arthur W. Larson, W. A. Morin, A. C. Wedge and H. C. Carlson. The company makes a specialty of field

seeds, but also handles garden and flower seeds. Mr. Thompson is president, and Mr. Larson, secretary-treasurer.

At the annual meeting of the A. A. Berry Seed Co., held recently in Clarinda, Iowa, a dividend of 10 per cent on the first six months' business was declared. The old officers were reelected as follows: A. A. Berry, president; M. R. Ansbach, vice-president; W. C. Affelt, secretary, and A. F. Galloway, treasurer. These, with F. R. McKee, George W. Standage and W. E. Whittaker, constitute the board of directors.

The clover seed grades on the Toledo Produce Exchange for this season, as established by the board of directors, are as follows: Choice Clover Seed—To be bright in color, dry, sound, plump, well cleaned and containing very few foreign seeds, and of uniform quality. Prime Clover Seed—To be good color, dry, sound, reasonably clean and only slightly mixed with brown and foreign seed. No. 2 Clover Seed—To be merchantable clover seed, but too badly mixed with dirt, brown or foreign seed, or in other respects not good enough for prime. No. 3 Clover Seed—To be merchantable clover seed, to include very brown, shrunken or dirty seed, and too badly mixed with foreign seed for No. 2. Rejected Clover Seed—To include all seed, very dirty, or so badly mixed with foreign seed as to render it unfit for No. 3. No Established Grade—To include all grades of seed not good enough for rejected and too good for tailings. Mammoth Alsike and Timothy—Graded by above rules. Only changes from last year are that it officially defines the "No Established Grade," which has been rather indefinite. In Rejected the part admitting damp or damaged has been stricken out.

TRANSPORTATION

The Great Western has reduced rates on grain from Kansas City to Chicago 2½ cents per hundred.

On August 1 the C. & E. I. road abolished switching and reconsignment charges on grain on their road turned over to the Rock Island for delivery to the nine elevators at South Chicago and Iron-dale.

A dispatch from Topeka, Kan., under date of August 4, says that Carr W. Taylor, attorney for the state board of railroad commissioners, is preparing to begin proceedings against all of the railroads of Kansas to compel them to reduce grain freight rates.

A conference will be held in Chicago on August 16 between traffic officials of Eastern and Western roads to establish a new basis of rates on grain from the West to points in the territory of the Central Freight Association. Instead of rates based on the upper Mississippi River crossings, the shippers of grain want rates established to Chicago and from Chicago to the East.

E. S. Boyd, traffic manager of the Chicago Board of Trade, has made the following announcement: "Effective with close of business August 15, 1905, the Chicago Great Western Railway will cancel special rates on wheat (originating west of the Missouri River) from East Dubuque, Ill., to Detroit, Mich., Toledo and Dayton, Ohio. On and after that date proportional rates, as shown in Western Trunk Line joint through freight tariff No. 747, will govern."

Grain men and millers in Texas feel that they are discriminated against by the new grain rate, effective July 14, from Oklahoma and Indian Territory points to Texas. The new rate shows an advance of about 25 per cent over the one formerly in force. The old proportional rate from El Reno to Fort Worth was 14¾ cents per hundred, and the special flat rate was 17¾ cents. The new rate is 25 cents per hundred, as compared with 20½ cents to Memphis, 15 cents to Little Rock and 7½ cents to Kansas City.

The new demurrage rules promulgated by the Arkansas Railroad Commission on July 19 became effective August 5. It is ordered that when a shipper makes written application to a railroad company for a car or cars the railroad company shall furnish the same within five days. It is provided, however, that shipper not using cars ordered shall pay demurrage for such time as he holds the cars at the rate of \$1 per day. When freight in carloads or less is tendered the railroad agent must immediately receive the same for shipment and issue bills of lading therefor, and whenever received the shipments must be carried forward at the rate of not less than fifty miles per day.

The first car of new crop rice reached New Orleans about August 1 from St. Martinsville.

IN THE COURTS

An involuntary petition in bankruptcy was filed at Fargo, N. D., against John Minckler, a Benson County grain buyer.

The Capital Grain Co., Guthrie, Okla., on July 18 brought suit against Hannington & Brinkley, at Wichita, for \$230, loss on a deal in wheat. The grain was sold to be loaded at Lahoma, Okla., but owing to defendants' negligence in the details of shipment the Capital Co. claims to have lost the amount sued for.

John Abbott has been appointed trustee in bankruptcy for the Fred Brown Commission Co. of Boston, which was petitioned into involuntary bankruptcy in June by three Illinois concerns. The concern has filed a schedule with the court, showing liabilities of \$40,828, and assets of \$16,972. There are about 70 creditors.

C. C. C. Wolf, cashier and principal owner of the State Exchange Bank of Parkersburg, Iowa, on July 25 filed in the United States Court at Chicago a bill for accounting and return of property against the American Trust and Savings Bank and E. H. Prince, formerly of the Chicago Board of Trade. Wolf claims that he became a customer of Prince in various stock and grain transactions and deposited certificates with him to cover margins. Now, he declares, he is unable to recover his property or secure an accounting. He claims that a certificate of deposit for \$24,000 and some bank stock certificates are being fraudulently withheld.

The Hayes-Eames Elevator Company of Lincoln, Neb., has begun an action against the Postal Telegraph Co., claiming damages of \$804.82 with interest. The complainant says in the bill that on March 25 last, a message was received from the Calumet Elevator Company of Minneapolis, offering to buy a lot of 15,000 bushels of wheat at \$1.06¾ per bushel. This offer was instantly accepted by the Hayes-Eames Company, and a message to that effect sent over the Postal wires. But this acceptance, it is alleged, was not delivered to the Minneapolis company, which repudiated the offer a few days later when a letter confirming the telegram arrived there. All the complainant company could then get for its wheat was \$1.02½, making a net loss of \$804.82.

The Missouri Pacific R. R. Co. will contest the law of Kansas requiring railroads to build sidetracks to grain elevators located near the right of way. The specific case was brought against the railroad company by the Hargreave Grain and Live Stock Co. at Mills, Rush County, but two others are pending contingent on the result of this litigation. The Missouri Pacific denies the right of the railroad commissioners to fix the location of a sidetrack and the terms and conditions for building is denied, for the reason, "That said condemnation and appropriation would be for a private and not a public use; and that the provision of the statute under which said association makes its petition is unconstitutional and void because pretending to authorize the taking of property for a private use and purpose, and for the further reason that said law does not make adequate provision for the payment of compensation for any lands taken or track constructed for the private use and benefit of said plaintiff herein."

Ed. Ammon, W. J. Dull, Aaron Wright and H. G. Cress have brought suit against Ed. McCue, in Dark County Common Pleas Court, for injunction and to enforce the specific performance of a contract entered into between McCue and the plaintiffs. The plaintiffs allege that when about eight or ten months ago Mr. McCue sold his grain elevator at Pittsburg to Ed. Ammon, who shortly thereafter formed a partnership with H. G. Cress and W. J. Dull, and engaged in the operating of the elevator, he agreed not to go again into the same business in the same village. A few weeks ago Mr. McCue commenced work on the construction of a grain elevator building in the same village, but a short distance removed from the one he had sold Mr. Ammon. Hence the suit for injunction, etc. The court on August 4 handed down a preliminary opinion, by which Mr. McCue is permitted to continue the work on his new elevator building if he so desires, but he is enjoined from carrying on the grain and coal business, or soliciting customers and the like in the village until the final hearing of the case.

Under the new Cones law of Kansas, the state grain inspector is required to give the shipper, on application therefor, a certificate showing the actual weight of the car without dockage of any amount.

OBITUARY

Henry T. Gubbins, a member of the Chicago Board of Trade for many years and formerly connected with the grain sampling department, died on July 24.

W. C. Price, for twenty years a grain dealer at Lampasas, Texas, died on July 21, aged 60 years. Death was due to paralysis. He is survived by four sons and a daughter.

Charles H. Paull, a member of the flour and grain firm of John Paull & Co., Taunton, Mass., died on July 27. He was born in 1830 and had resided in Taunton all his life. He leaves a widow, one son and two daughters.

Nicholas Dilfer, founder of the flour, feed and grain firm of N. Dilfer's Sons, Buffalo, N. Y., died at his home in that city on July 28, aged 68 years. Mr. Dilfer had been a resident of Buffalo since 1851. He leaves a widow, two sons and two daughters.

Henry Cratz, senior member of the firm of Cratz Bros., seedsmen, Toledo, Ohio, died in that city on July 25, aged 56 years. Prior to locating in Toledo Mr. Cratz was in business at Shanesville, Ohio, for a number of years. He was a member of the Toledo Produce Exchange.

Elijah Walker died suddenly of apoplexy at his home in Assumption, Ill., on July 23, aged 62 years. Mr. Walker was a well-known grain man and had owned elevators at Dunkel, Assumption, Walker, Moweaqua and Macon, Ill. He was a native of St. Clair County, Ill., and an extensive land owner.

Walter L. Peavey, agent for the Eagle Roller Mill Co. at its elevator in Redwood Falls, Minn., was drowned in Lake Redwood at that place on July 15, while bathing. The Masons and the Knights of Pythias had charge of his funeral. Mr. Peavey was about twenty-five years of age and leaves a widow and two small children.

Jacob Williams, a member of the Chicago Board of Trade and a resident of this city for fifteen years, died on July 27 at his home, aged 63 years. Mr. Williams was the president of the Williams Grain Co., with offices at Thirty-ninth Street and Stewart Avenue. He came to Chicago from Freeport, Ill. A son, James D., survives him.

George W. Hunt, a member of the Chicago Board of Trade, died suddenly in this city on July 22. Mr. Hunt was trading in the corn pit of the Exchange when he was stricken with an epileptic fit. He staggered backward from the top of the pit and fell to the bottom. Efforts to revive him were fruitless and he was taken to his home, where he died a short time later.

Ernest Ballman, a wealthy grain dealer, mayor of Laurium, Mich., and president of the bank at that place, dropped dead in the lobby of the Spalding Hotel at Duluth, Minn., on July 10. He had just been shaved in the hotel barber shop and had passed into the lobby when he was stricken. The deceased was 50 years of age and had been in poor health for some time from heart trouble.

James Munce, for many years a grain and commission merchant in Cincinnati, Ohio, and one of that city's oldest business men, died at his residence in Cumminsville, a suburb, on July 9. Mr. Munce was in his seventieth year and had been a resident of Cincinnati for fifty years. He was a native of Belfast, Ireland, coming to America when a youth. A widow and three children survive him.

Daniel Sumner, formerly a grain dealer of Des Moines, Iowa, died at the home of his daughter in Sioux City, Iowa, on July 28. He was 90 years of age. He was born in Erie County, N. Y., and resided in that state until he was 50 years old. Then he went to Des Moines, where for thirty years he was a prominent grain merchant and commission man. At the age of 80 he retired from business and removed to Sioux City. He is survived by six sons and his only daughter.

Daniel M. Robbins, a pioneer resident of St. Paul, Minn., died suddenly of heart disease, at his home in that city on July 18. He was 73 years of age and leaves a wife and six children. Mr. Robbins was a native of Phillips, Franklin County, Me.; came west in 1855, locating at Anoka, Minn., where he and his father engaged in business. In 1857 the deceased became manager of Woodbury & Co.'s mill at St. Francis, Minn. In 1861, following a year's visit to the Colorado gold fields, he settled in St. Paul and for eighteen years he was engaged in the real estate and live stock and railroad business. He was one of the organizers in 1882 of the Northwestern Elevator Co. of St. Paul. A year later he was elected president and manager. The company operates over 100 elevators along the

line of the Great Northern Railway in the Dakotas and Minnesota.

Thomas A. Taylor, president and general manager of the Northwestern Mill and Elevator Co. of Toledo, Ohio, died at his home in that city on July 19, after a long illness. He was one of the best-known grain men and millers in the country and had spent the greater part of his life in these lines. He was born at Loudonville, Ohio, 53 years ago and was a graduate of Denison and Rochester universities. He removed to Toledo in the eighties, and with his father, A. A. Taylor, became the owner of the old Manhattan Mills in North Toledo. In 1886 the plant was enlarged and improved and the business was reorganized under the name of the Northwestern Mill and Elevator Co., of which he was president and manager. He was president of the Toledo Produce Exchange in 1895, and served as vice-president a number of terms. Previous to his illness he was a director in the Ohio Savings & Trust Co. Mr. Taylor was also for four years the president of the Ohio Millers' Insurance Co. In November, 1881, he was married to Florence Fuller, daughter of General John W. Fuller, and she with two children, John H. and Irene Taylor, survive. His mother, Mrs. T. P. Taylor, who resides in Toledo, a brother, Charles, who lives in North Dakota, and two sisters also survive.

RUST DIDN'T WORK.



RUST VS. RECEIPTS.

Which will it be? Our fellow-townsmen, Knabenshue, might work the "ship" with the "load," but how'll the Bull come out?—Zahm's Circular, July 29.



The "Rust" didn't work.—Zahm's Circular, August 5.

English lands still continue to go out of cultivation, the shrinking in 1904 compared with 1902 having been 259,000 acres in grain, 132,000 acres in green crops, 111,000 in clover and grasses and 6,000 in flax.

Private reports from Russia say: "It is reported that owing to lack of storage and transportation facilities the grain shipping situation is in a precarious situation. This spring transportation at St. Petersburg was in a congested condition. At all times a serious blockade and car famine retarded the movement of grain, owing to inefficient service on the railways."

The Argentine congress has authorized the government to spend a considerable sum of money on carrying out improvements in the ports of Buenos Aires and La Plata, and the work is to be put in hand at once. With all the improvements that are to be made at La Plata for the handling and storage of grain, a great improvement is expected in the handling of cereals when the next harvest comes round.

GRAIN IMPROVEMENT AND CORN BREEDING.

[A paper by Edward M. East, M. S., University of Illinois Agr. Exp. Station, read at the annual meeting of the Illinois Grain Dealers' Association.]

[Continued from June Number, p. 671.]

On the one hand are the industrial concerns, which demand a high starch corn as the raw material from which to manufacture the market starch, glucose, sirup and alcohol, while the other constituents enter into the manufacture simply as a utilization of by-products, although, to be sure, the oil is more valuable than the real products. The corn, then, that the factory prefers is a high starch, high oil corn, or, in other words, a low protein, high oil corn. On the other hand, the demand of the feeder is for corn with a higher protein content. Corn in itself, we are told, is not a properly balanced ration for feeding purposes, so that it must be aided by such strength producing material as bran or gluten meal, or other concentrated protein foods, simply because the proportion of carbohydrates, as we call the starches and sugars, is too great for the proper nourishment of the growing steer or the milch cow. For this reason, it would seem to be an incalculable advantage to the farmer to be able to grow his protein in his corn, instead of being obliged to pay out his hard cash for concentrated feeds.

The advantage of this can be more readily seen when we consider that the price of corn varies from 1/2 cent to 1 cent per pound, while the cost of protein in the principal stock-feeding states varies from 3 to 5 cents per pound, showing that the protein is several times more valuable per pound than corn itself.

And, finally, we have a demand from growers of bacon hogs for a low-oil corn, which is known to produce a hard, firm quality of bacon, such as is desired by the export trade.

It was in view of such facts as these that six years ago the Illinois Experiment Station started out to improve corn in various directions; and it is the results of some of these investigations that I now wish to present.

A variety of white corn, known as Burr's White, which has been grown at the station for a number of years, was chosen for the experiment.

As there was no basis to begin work upon as yet, it was necessary to the general facts concerning the chemical composition of corn and its variations. An exhaustive study of the subject was carried on by the chemist, Dr. C. G. Hopkins. Among numerous interesting facts discovered, two principles were firmly established, upon which the methods in all of this work are based.

Analyses of a great many different kernels from the same ear and from different ears showed:

(1) That the ear of corn is approximately uniform throughout in the chemical composition of its kernels.

(2) That there is a wide variation in the chemical composition of different ears, even of the same variety of corn. These two facts are well illustrated in Table 1.

TABLE 1. Protein in Single Kernels.					
Ear A.		Ear B.		Ear C.	
Protein.		Protein.		Protein.	
Per Cent.		Per Cent.		Per Cent.	
Kernels.	No.	12.46	11.53	7.45	8.72
"	2....	12.54	12.32	7.54	8.41
"	3....	12.44	12.19	7.69	8.37
"	4....	12.50	12.54	7.47	8.31
"	5....	12.30	12.14	7.74	8.02
"	6....	12.49	12.95	8.70	8.76
"	7....	12.50	12.84	8.46	8.89
"	8....	12.14	*	8.69	9.02
"	9....	12.14	12.04	8.86	8.96
"	10....	12.71	12.75	8.10	8.89

*Lost by accident.

The uniformity of the individual ear makes it possible to estimate or to determine the composition of the corn by the examination or analysis of a few kernels. The remainder of the kernels on the ear may then be planted if desired. The wide variation in composition between different ears furnishes a starting point for the selection of seed in any of the several different lines of desired improvement. Thus by shelling off two rows of corn from the ear as a sample to be analyzed, the composition of the ear was found, leaving practically 90 per cent of the corn of known composition to be planted. It was in this manner that selection for breeding was started.

From the crop of 1896, two bushels, containing 163 ears, were selected from the crib, and each ear was analyzed with great variation in composition between individual ears, and with the average composition.

Carbohydrates	82.95 per cent
Protein	10.92 " "
Oil	4.70 " "
Ash	1.43 " "

The selections were then commenced in four di-

rections, viz., for increase of protein, for decrease of protein, for increase of oil and decrease of oil, a few of the best ears for each purpose being selected and each lot planted in a separate and isolated plot in order to prevent mixing with other kinds. From the crop of each of these another selection of seed for the following season was made by analyzing a large number of ears. This process has been repeated year after year, with results as shown in the tables following:

TABLE 2.

Increase and Decrease of Protein.

Year.	High-protein Plot, Average Per Cent.		Low-Protein Plot, Average Per Cent.		Differences Between the Crops, Per Cent.
	In Seed Planted.	In Crop Harvested.	In Seed Planted.	In Crop Harvested.	
1896....		10.92		10.92	.00
1897....	12.54	11.10	8.96	10.55	.55
1898....	12.49	11.05	9.06	10.55	.50
1899....	13.06	11.46	8.45	9.86	1.60
1900....	13.74	12.33	8.08	9.34	2.99
1901....	14.78	14.12	7.58	10.05	4.07
1902....	15.39	12.34	8.15	8.22	4.12
1903....	14.30	13.04	6.93	8.62	4.42
1904....	15.39	14.98	7.00	9.27	5.71

This table shows the average percentage of protein each year in the seed planted, and in the crop harvested in each of the breeding plots. We can in this way compare the results of the different seasons.

The last column shows practically a continuously increasing separation between the high-protein and the low-protein strains. It shows that there have been developed two strains of corn, one of which is now one and one-half times as rich in protein as the other.

TABLE 3.

Results of Breeding Corn for Increase and Decrease of Oil.

Year.	High-oil Plot, Average Per Cent.		Low-oil Plot, Average Per Cent.		Differences Between the Crops, Per Cent.
	In Seed Planted.	In Crop Harvested.	In Seed Planted.	In Crop Harvested.	
1896....		4.70		4.70	.00
1897....	5.39	4.73	4.03	4.06	.67
1898....	5.20	5.15	3.65	3.99	1.16
1899....	6.15	5.64	3.47	3.82	1.82
1900....	6.30	6.12	3.33	3.56	2.56
1901....	6.77	6.09	2.93	3.43	2.66
1902....	6.95	6.41	3.00	3.01	3.40
1903....	6.73	6.50	2.62	2.97	3.53
1904....	7.16	6.96	2.80	2.89	4.07

Table 3 shows in like manner the progress in breeding for high oil and low oil. There has been a continuously widening separation of the oil contents of the crops of the two plots until a strain of high-oil corn has been developed which contains considerably more than twice the amount of oil contained in the low-oil strain.

The importance of this can be better understood perhaps by considering that the average protein content of wheat is 13.3 per cent, and the average protein content of oats is 13.2 per cent.

Attention is called to the fact that the drouth in 1901 hindered the full development of the kernels, and this seasonal influence was to produce corn with a high percentage of protein; but, nevertheless, the high-protein plot increased more than the low-protein plot, thus showing the effect of breeding even during this very abnormal year.

METHODS.—The methods of corn breeding devised by the Illinois Experiment Station, and now used not only by them but also by the Illinois Seed Corn Breeders' Association, and, to a large extent, by the other experiment stations and other corn growers, have for their object the improvement of corn in yield and quality. With some improvements, the methods are now the same as we have employed for the past eight years, and they have given results which enable us to assert with confidence that by these methods corn can be improved in a very marked degree, and for many different purposes. The yield of corn can be increased, and the chemical composition of the kernel can be changed as may be desired, either to increase or to decrease the protein, the oil or the starch.

Following is a brief description of the methods of corn breeding as now practiced:

In general the most perfect ears obtainable of the variety of corn which it is desired to breed should be selected, starting with corn from a reliable, known source. Time should not be spent, however, upon fancy points, for it should be remembered that nature sometimes develops different peculiarities in different blood lines, which go hand in hand with high yield, but which do not make fancy or show ears. If the breeder wishes to improve the quality (chemical composition) of the grain, as well as the yield and type of his corn, it is recommended that he choose at least 200 ears

of the desired physical type, to be further examined as to quality.

METHOD OF MECHANICAL EXAMINATION.—The method of making a chemical selection of ears of seed corn by a simple mechanical examination of the kernels is based upon the fact that the kernel of corn is not homogeneous in structure, but consists of several distinct and readily observable parts of markedly different chemical composition.

For our particular purpose of judging from the structure of the kernel as to its composition, we need consider but three principal parts, namely:

(1) The darker colored and rather horny layer lying next to the hull, principally in the edges and toward the tip end of the kernel. This part is fairly rich in protein and contains from one-half to two-thirds of all the protein of the kernel.

(2) The white, starchy-appearing part, occupying the crown end of the kernel and usually also immediately surrounding or partially surrounding the germ. This part is poor in both protein and oil, consisting mainly of starch.

(3) The germ itself, which occupies the central part of the kernel toward the tip end. This is very rich in oil. More than four-fifths of the entire oil of the kernel resides in the germ. It is also rich in protein, containing nearly one-fifth of all the protein in the kernel, although the germ itself constitutes about one-tenth of the weight of the kernel.

In selecting seed corn by mechanical examination for improvement in composition, we remove from the ear a few average kernels. Cut these kernels into cross-sections and examine these sections as they are cut, usually simply with the naked eye, selecting for seed those ears whose kernels show the qualities desired.

If we are selecting seed ears for high-protein content we save those ears whose kernels show a small proportion of the white starch, especially immediately surrounding the germ. If selecting corn for low-protein content, we look for a large proportion of white starch surrounding the germ. Our results have shown that the white starch in this position—that is, surrounding the germ toward the tip end of the kernel—is a better index of the protein content than the starch in the crown end.

If we are selecting seed for high-oil content, we save those ears whose kernels show a large proportion of firm and solid germ; while if seed of low-oil content is desired, we look for a small proportion of germ in the kernel.

It should be emphasized that it is not the absolute, but the proportionate, size or quantity of germ or of white starch which serves as a guide in making these selections.

[TO BE CONCLUDED.]

AS FRANK I. KING SEES IT.

Money grows on wheat bushes. Our little Queen Miriam so thought during the Leiter year when she was quite new.

Shake the bushes. No shakee, no monie. It is all in the shake. There are no loaded dice. It merely requires three aces to win. They are nerve, foresight and money. All have the same chance. It is not necessary to belong to the Millionaires' Club. Wheat is different from stocks. It is an international and unknown quantity. There is no common and preferred water with bonds and debentures on the side and a "system" to contend with. It cannot be successfully manipulated. Some millionaire plungers, like Leiter and Gates, try it about every ten years and fail. Speculation does temporarily inflate and depress prices, but supply and demand of the world ultimately decide. No country can control it. United States is the largest producer, but raises only quarter of the crop. Most civilized people eat it. Some country is harvesting almost every month in the year.

Conditions are constantly changing. United States was the largest exporter a few years ago. Last year it was one of the smallest. Europe did not starve. This generation may see our domestic wants equal our crop. Last year our prices were mostly upon a domestic basis. This season our exportable surplus is materially larger, not all secured, but prices are depending more upon foreign values. Farmers' bins, mills and country elevators were empty. They are absorbing many millions. Futures now command a premium, encouraging a larger visible supply. Millers are securing a supply nearer home. Farmers are mostly capitalists, have had dollar wheat recently and are not inclined to fill the bargain counter with their surplus. Country bulls are loading up at home. Speculation is quiet in everything. Confidence has been a little impaired by the graft talk and exposures. No two seasons are exactly alike.—King & Co.'s Circular.

The Texas Grain Dealers' Association now has 180 members, the highwater mark thus far.

FACTS AND FIGURES

The first car of new spring wheat of the year reached Minneapolis on August 8. It came from St. Peter, Minn.

Grain men as well as milling experts say the Kansas and Southwestern wheat is this year the finest quality on record.

Most property owners do not take into consideration any depreciation for age, wear and tear in valuing property.—McCotter.

New corn began moving into the interior towns of Texas as early as August 1, bringing (at Bryan) 60 cents, the highest opening price for some years.

Mr. David Wallace has been reappointed inspector and weigher of seeds for the Toledo market. William R. Hadnett is retained as assistant.

H. B. Dorsey, secretary of the Texas Grain Dealers' Association, is now located permanently in Fort Worth, his office being room 307 Wheat Building.

The Northern Grain Co., Manitowoc, Wis., is investing \$18,000 in a sheep feeding ranch near that city. It will have capacity for 32,000 head of sheep.

The attorney for the Kansas Railroad Commission is preparing to begin proceedings against the railroad companies to secure a reduction of grain rates in that state.

The New Orleans Board of Trade grain inspection fee on inward grain has been increased from 40 cents per car to 50 cents. The change is now in force and effect.

The price allowed for seed bags in the Toledo market is 18 cents for Stark's and 16 cents for American and same quality. The value of damaged bags is fixed by seed inspector.

President King of the Iowa Grain Dealers' Association has appointed the following arbitration committee: A. Moorhouse, Glidden; H. S. Buel, Livermore; James Crighton, Chicago.

The Montreal Harbor Commissioners report that in June 1,000,000 bushels and in July 838,000 bushels of grain were handled by the new grain elevator owned and operated by the Commission.

It is said that Russia will attempt a modification of the American system of grain inspection at Black Sea ports, the inspectors to be controlled by the chambers of commerce. Odessa and Nicolaieff, however, do not respond enthusiastically to the suggestion.

The steamer Westmount and consort of the Montreal Transportation Company's fleet passed Port Colborne on July 21 loaded with wheat bound from Kingston to Fort William. These cargoes originally were shipped from Fort William and in returning there make a new record for the canal, being the first wheat ever to pass westward through the Welland.

Two Russian exporters were lately fined by the German Arbitration Committee for supplying oats not in accordance with the sample. Knowing that they were innocent the exporters in question demanded to see the samples alleged to have been supplied by them, and found that they contained oats of a quality which is not grown at all in Russia. It appears that the German agent, being anxious to sell, substituted German oats for the Russian.

Early last spring two bushels of seed speltz were purchased in Nebraska and distributed for experiment on the dry farms adjacent to Salt Lake City. On July 25 the first specimen of the return was brought in. It had no irrigation whatever. It was planted April 4 and harvested July 23, so that it required 110 days to make the crop. The straw ranged from one to two feet in height. The yield of grain was not heavy, but the berry was solid and of good quality. Those who have been watching the experiment are confident that the new grain will be successfully grown on the dry farms of Utah.

It is reported that the Great Southern Railway will construct a dock and grain elevator at Bahia Blanca, Argentine Republic, the present new jetty being quite inadequate for even present requirements. The latter will be enlarged in any case and an elevator erected. Even the largest land owners have very little accommodation for their crops, and the colonist or small farmer has none at all, so they look to the railway company to construct at their station warehouses large enough to store the entire crop of the large district served by it. Then, when the price of corn rises and they wish to sell, they hope the company will be able to transport at once many thousand tons of grain.

FIRES--CASUALTIES

The Western Elevator at Elkhart, Iowa, was struck by lightning recently and burned to the ground.

H. Trulsen's grain warehouse at Mountain View, Cal., was burned on July 9, causing a loss of \$4,000; fully insured.

The Great Western Elevator at Hatton, N. D. was struck by lightning on July 15. The fire was extinguished before great damage resulted.

A grain and flour warehouse at New Milford, Conn., was unroofed during a recent windstorm, and its contents, 1,000 bags of grain and flour, were badly damaged.

Peter Juckem's elevator at Chilton, Wis., was burned on the night of August 8. The loss is \$40,000 on the building and \$12,000 on its contents, partly covered by insurance.

One side of G. W. Richards' elevator at New Paris, Ohio, gave way on the afternoon of July 20 allowing a large quantity of wheat to run out. Practically all the grain was saved, however.

The M. & W. Elevator at Hillsboro, N. D., was destroyed by fire of unknown origin on the night of July 30. Only a small amount of grain was burned. The elevator will be rebuilt at once.

Two elevators and a warehouse at Shelburne, Ont., owned by E. Berwick & Co., were destroyed by fire of unknown origin on the morning of July 26. The total loss is about \$30,000, with \$11,000 insurance.

The large elevator at the sheep feeding station in Edgerton, Wis., was burned on the night of July 31, causing a loss of \$10,000. There was \$5,000 insurance on the grain and \$2,500 on the building and machinery.

Seven men were precipitated from a scaffolding to the bottom of a grain bin, 70 feet below, at the Grand Republic Mill and Elevator in Superior, Wis., on July 25. None of the men were killed, but all were seriously injured.

W. C. Page & Co.'s grain warehouse at Ionia, Mich., was struck by lightning on August 5 and burned to the ground. The total loss is \$15,000. The building was owned by the Pere Marquette road and the grain by Page & Co. There was \$5,800 insurance on the property.

Anthony Van Dulla, aged 35 years, an employe of the Southern Elevator at East St. Louis, Ill., was smothered in a wheat bin on July 13. While he was at work on the day of the accident he, in some manner, fell into a chute and was carried into a bin which was being filled with grain.

Outram & Wilson's elevator and warehouse at Lippincott Station, near Urbana, Ohio, were burned on the night of July 25, together with 2,500 bushels of grain. The fire started in the engine room. The loss is estimated at \$5,000, partially covered by insurance. The elevator was built about nine years ago.

Fire, of supposed incendiary origin, destroyed the grain elevator at Orleans, Ill., owned by Hubbs, Lewis & Beggs. Several other buildings were also burned, virtually wiping out the town. The fire occurred at 3 o'clock a. m., and started in the elevator. The loss was \$25,000, with \$8,000 insurance.

A gas explosion occurred at the Mutual Elevator in Taunton, Minn., on July 14, setting fire to the building. The local fire department extinguished the blaze before much damage was done. Tom Ahern, the buyer, had gone down into the pit and while there lit a match. An explosion followed, but he was not seriously injured.

The corn shelling plant of Hughston Bros., wholesale and retail grain dealers at Plano, Texas, was destroyed by fire at 1:30 o'clock a. m., on July 7. The firm's new elevator and oat clipping plant near by were saved. The cause of the fire is unknown. The loss is \$4,000; insurance, \$1,000.

The three elevators at McCook, Neb., suffered damage by reason of the heavy rains the last of July. Water entered the grain pits of all three houses. In the pits of the two Ferguson elevators the water was six and seven feet deep. The Easterday-Real Elevator had sixteen feet of water to contend with. The damage in this house is estimated at about \$500.

The mill, elevator and warehouse of the Kansas City Milling Co., Kansas City, Mo., were destroyed by fire on the night of August 1. The fire broke out at about 7:30 o'clock p. m., starting in the boiler room, which was located between the elevator and warehouse. The cause is unknown. The losses are as follows: Mill and warehouse, \$75,000; elevator, \$18,000; flour, \$14,500; bags, \$9,000; wheat, \$6,400, and feed, \$300, a total of \$132,000.

The total insurance is about \$92,000. The elevator was built in 1901 and had a capacity of 65,000 bushels. The capacity of the mill was 750 barrels a day.

The grain elevator at Douglas, Ill., owned by J. E. Potter of Galesburg, was burned on July 15. The fire was discovered at about 3:30 o'clock a. m., and is thought to have originated from a locomotive spark. The total loss was between \$4,000 and \$5,000, with \$2,500 insurance. About 1,500 bushels of oats were destroyed. The elevator will be rebuilt at once.

The elevator at Straight Creek, Kan., a station on the Rock Island Railway between Topeka and Horton, was destroyed by fire on the night of July 20. A carload of wheat on a nearby siding was also burned. The fire is supposed to have originated in the boiler room. The elevator was owned by Hedge, Brown & Co. of Whiting, Kan., and was valued at \$2,500.

The Missouri Grain Co.'s elevator at Moberly, Mo., was destroyed by fire on the afternoon of July 26. A hot journal in the top of the building is supposed to have started the fire. Only the office building, some distance away, was saved. The elevator was built in 1902 at a cost of \$95,000. It was insured for \$60,000. The grain stored in the building was insured for \$30,000.

An elevator and warehouse at Renova, Minn., were burned on July 14. The elevator was owned by Pierce & Stephenson and the warehouse was the property of G. W. King. The cause of the fire is unknown. The elevator was empty, but the warehouse contained a quantity of flour and oats. The loss on the elevator is estimated at \$1,000, and the warehouse and contents were valued at between \$300 and \$400.

Fred Tanke's grain elevator on the Rock Island right-of-way at Avoca, Iowa, was destroyed by fire of incendiary origin on the night of July 29. Oiled waste was placed under a loading chute and set on fire. The loss on the elevator is estimated at between \$1,500 and \$2,000; loss on contents, about \$1,000. The burning of the elevator was the last of a series of supposed incendiary fires which have occurred in the town this summer and several parties are now in jail charged with these crimes.

The grain elevator at Jefferson Junction, Wis., operated by the Lytle-Stoppenbach Co., maltsters, was destroyed by fire on July 22. A spark from a passing engine is supposed to have caused the fire. The total loss is estimated at about \$25,000. There was \$9,500 insurance on the contents of the elevator, and \$1,000 on the machinery. The small office building and contents were insured for \$450. The elevator itself was owned by the Chicago & North-Western Railway Co., and was not insured. The contents of the elevator, 6,000 bushels of grain, and the machinery were owned by the Lytle-Stoppenbach Co.

The Northwestern Elevator Co.'s elevator at Maynard, Minn., was totally destroyed by fire of supposed incendiary origin on the morning of July 13. There had been no fire in the building for several months, and a number of previous attempts to burn the elevator had been made. The elevator contained about 2,500 bushels of grain. This is the second total loss to the company of its elevator at this place, the first having been about five years ago. No one knows any motive for the incendiarism, if such exists, and no clue has been found of the guilty parties. The elevator was valued at about \$3,000, and the contents at \$1,500. The amount of insurance is known only at headquarters in Minneapolis.

The presence of mind and prompt action of Towerman Mauk of the Vandalia Railroad at Clymers, Ind., saved G. M. Reed & Co.'s elevator from destruction by fire on the night of July 24. The elevator was filled with wheat. As a precaution against fire, the owners had installed a number of barrels of salt water at various points about the elevator to be used in extinguishing fire. At about 11 o'clock p. m., Mr. Mauk discovered flames issuing from the smokestack of the power plant, caused by the soot in the flue catching fire and threatening the entire structure. Mauk left his post, and hurrying across the fields to the elevator, single handed began a fight with the flames. With the salt water, he waged a successful battle and in a few minutes had the fire extinguished.

Col. Thos. Soward, who for a short time past had been acting as grain inspector of Oklahoma, having on August 3 resigned because the fees of the office were too small to pay for his time, Governor Ferguson has decided not to appoint a successor unless there is a demand from the farmers for an inspector. There is no grain inspection law in Oklahoma which requires the inspection of grain, it being optional with the seller. Although the Grain Dealers' Association had the system established to benefit the farmers as well as themselves, very few farmers ask for inspection and the fees are very small.

THE CO-OPERATIVES

The Cropsey Elevator Company, Ill., has had to increase capital stock.

The Fosston Farmers' Elevator Company, Minn., will lease their elevator.

The Adrian Alliance and Elevator Company, Minn., is going out of business, but is solvent.

The Farmers' Co-operative Elevator Company, Appleton, Minn., earned a 50 per cent dividend.

The Farmers' Grain Association at Kearney, Neb., has had to raise \$500 to keep the elevator open.

The Farmers' Elevator Company, Irene, S. D., on a business of 268,000 bushels earned a 150 per cent dividend.

The Carman Farmers' Elevator Company, Manitoba, had a deficit last year and the elevator will be offered for sale.

The Farmers' Elevator Company of Morgan, Minn., did a business last season of \$82,000 and made a profit of \$123.64.

The Portland Farmers' Elevator, N. D., are undecided whether to close their house or keep it open. It does very little business.

The Farmers' Elevator Company of Renville, Minn., on 153,000 bushels of wheat, barley, oats and flax, last season made \$3,974.

The Springfield Farmers' Elevator Company, Minn., has voted to increase the limit of possible indebtedness from \$2,000 to \$25,000.

The Farmers' Co-operative Elevator Company of Luverne, Minn., lost money last season, but an effort is being made to keep the concern going.

The Waubay Farmers' Elevator, N. D., for the year ended April 30, 1904, did a business in grain, flaxseed and coal of \$89,967 and made \$3,136.90, of which \$1,000 was paid in dividends.

The Winthrop Farmers' Elevator, Minn., last year barely realized expenses on a business of \$90,000. Over 22,000 bushels of wheat graded below the manager's grading. This was nearly 25 per cent of the total.

On petition of Jas. Withrow a director and stockholder, a receiver has been appointed for the Union Elevator Company (co-operative) at New Richmond, Ind. This company was started two years ago with a paid-up stock of \$10,000, by farmers of the community. Owing to alleged mismanagement the enterprise has been a failure and there is now an outstanding indebtedness of \$11,000 against the company. The receiver gave bond of \$20,000 and was allowed by the court to borrow \$1,000 to run the concern until September, when it is generally expected the property will be sold under the hammer.

At the annual meeting of the Howard Grain, Mercantile and Elevator Company at Lotus, Ill., one of the speakers was the representative of a Chicago commission house that makes a specialty of organizing farmers' elevator companies in Illinois and Iowa. Just as a specimen of this interesting individual's oratory, we quote a report of his speech on the occasion from the Bloomington Pantagraph, as follows:

"He placed the modern American farmer on a pedestal of glory; praised him for what he had accomplished in peace and war, but flayed unmercifully with biting sarcasm the ones that 'hang back in the traces' and refuse to line up with their brothers and help fight the battle for industrial liberty. Incidentally Mr. Stickney took a well aimed shot at the villainous and unlawful methods of many of our railroads; argued for governmental control or ownership; and scathingly arraigned the great trusts and combines that stand between the producer and consumer, robbing both of the proceeds of their honest toil. He did not mince matters, but called things by their right names, branding political and commercial grafters, the men who have bought their way to wealth and power by bribing juries and corrupting courts and legislatures, as traitors to the spirit and letter of our institutions, more dangerous by far than the man who sinks a battleship or sells his country's secrets in time of war.

"In speaking of the indictment of the beef trust officials by the federal grand jury at Chicago, Mr. Stickney said that 'the people of this country are slowly coming to realize that penitentiaries are maintained, not only for the man who steals a ham from a country smokehouse, but for the men who insultingly defy the law and steal hams by the million from the farmers of the great Missouri

"The entire address was filled with humor, wit and irony and every farmer should hear such a speech. It was, as one farmer aptly put it, a 'Fourth of July oration in advance.' Selah!

CROP REPORTS

Corn in Maryland is running largely to stalk and farmers fear it will not ear well.

Kentucky will have a good oat crop this year and corn promises to be a bumper crop.

The quality of oats in Nebraska is excellent and the yield is fair. Corn is late, but is in good condition.

W. F. Kemper of the W. F. Kemper Elevator Co., Kansas City, says Kansas has the finest corn crop prospect ever seen in the state.

In New England corn is practically tasseled and silking is generally reported. Oats harvesting is general. Barley is a good crop.

The bean acreage in Michigan is below that of last year by about 15 per cent. Excessive rains have operated against the crop.

Irrigated grain in Utah is turning out well, but arid land grain, with some exceptions, is rather poor and in some places badly shrunk.

Basing its estimate on reports of country correspondents, Orange Judd Farmer anticipates an oat crop of approximately 900,000,000 bushels.

Early corn in Arkansas is doing well. Late planted is generally in poor condition from lack of cultivation and too much moisture. Wheat and oats have been injured in shock from rain.

Robert Pringle, Chicago, received samples of new wheat from Stratford, Ont., on July 28, with a report that the crop there was nearly all harvested and quality and yield were excellent.

The Michigan August report makes the wheat yield 18 bushels per acre. The area is about one million acres. The oat yield is 35 bushels to the acre. Corn condition is 78, against 72 a year ago.

The quality of Kansas wheat is above that of last year. Millers who are working on the new crop find that 4:30 or less will make a barrel of flour, whereas 4:50 to 5 bushels was the rule last year.

Oats are ripening rapidly in Wisconsin and the harvest will not be much later than last year, despite the late spring. The outlook for corn throughout the greater portion of the state is very satisfactory.

Reports from grain dealers in Iowa indicate an average yield of 36 bushels of oats and 30 bushels of barley per acre, and an average condition of 110 for corn, compared with last year.—Secretary George A. Wells.

Passenger Traffic Manager Eustis of the Burlington returned recently from a trip over the lines from St. Louis to Denver and from Denver to Chicago. He says crop conditions in the territory covered were never better.

Unusually hot weather during the latter part of July slightly damaged wheat in some sections of Washington. Winter and early sown spring wheat seem to have escaped, but late sown spring grain was damaged from 3 to 5 per cent. The harvest is proving a big one.

The preliminary report of the Commercial National Bank, Chicago, showing conditions pertaining to crops and the business situation in the territory bounded by Ohio, the Gulf of Mexico, the Rocky Mountains and Canada, suggests a greater yield for all crops than last year.

Missouri reports corn as follows: August condition, 97; acreage, 7,000,000; condition last month, 91; last year, 73, when the crop was 177,000,000. Rain has damaged wheat and oats. The wheat yield is estimated at 30,500,000, the same as last month. Clover is considerably below last year.

Reports from Orange Judd Farmer correspondents showed the average condition of corn on July 10 to have been 88.4 as compared with 89 a year ago. While the acreage, estimated at 94,236,000 acres, is larger than last year, it does not show the increase expected, according to this authority.

A crop note from Springfield, Ohio, says: "Rains for fifteen days to the south of us after wheat was cut made the wheat a little off color, but it is of good weight. Corn came on nicely in the hot weather following the rains; we never saw corn grow so much in a short time as it did during that time."

Record-Herald, August 7, said: "Twelve states that produced a total of 1,606,962,046 bushels of corn in 1904 will have a crop aggregating 330,867,390 bushels more than that amount this year, if present conditions meet with no unexpected change. The same states, producing 354,724,268 bushels of wheat last year, have yielded an increase of 112,037,286 bushels this season—more

than 30 per cent. Oats show a gain in the same territory, according to indications, of more than 100,000,000 bushels over the 685,810,215 bushels produced in 1904."

Some early wheat has been cut in North Dakota. Harvesting of rye and barley, and also of early oats has commenced. Flax is generally doing very well, although in some sections it has been damaged by wilt. Corn has made very rapid progress and is now in tassel in all parts of the state, and promises well.

The Market Record, Minneapolis, on August 4, published reports from correspondents which indicated a spring wheat yield of 16 bushels per acre for North Dakota, 14½ bushels for South Dakota and 15 bushels for Minnesota. Taking government figures on acreage a crop of 207,000,000 bushels for the three states is indicated.

William Whyte, vice-president of the Canadian Pacific Railroad Co., estimates the Canadian wheat crop at more than 100,000,000 bushels, against 55,000,000 last year. The increase in the crop is due, he says, to the wet June, in which there were many hot days, making the crop grow as though in a gigantic hotbed; also the increased acreage, there being more than 4,000,000 acres under wheat this year.

Oats thrashing has been general in Illinois and except from a few localities in the southern district where they were damaged in shock, a good yield of fine quality is reported. The general condition of the corn is very promising; it is tasseling in the northern district, earing well in the central, and has reached the roasting-ear stage in the southern. In those localities where there was little or no rain it is beginning to fire. Worms are injuring the roots in some parts of the northern district, and some damage has ensued from flooding on low lands in the southern district.

Iowa's state report for the week ended August 7, says: "The oats crop is mainly in shock or stack, and thrashing returns indicate a yield above the average of recent years. The harvest of spring wheat is nearly finished to the north line of the state, and the general condition of this crop is fairly good in the districts where the acreage is largest. There have been but few reports of damage by rust. Corn has advanced rapidly in response to high temperatures and generally ample moisture. It is earing heavily; and the earliest planted fields make good showing of roasting ears."

Van Dusen-Harrington Co., Minneapolis, under date of August 5, say that black rust has apparently not done serious damage. Continuing, the report says: "Investigations made for us this week by Mr. L. D. Marshall and other capable men go to show that there will be probably more smut, both loose and covered, than we have ever been obliged to handle before; that there will be a large amount of blighted wheat and a certain proportion of shriveled and rust-damaged grain, also, we are pleased to say, a large percentage of undamaged grain and almost certainly a larger proportion of milling wheat than on the last crop."

California's wheat crop is disappointing. Early prospects indicated a yield of 650,000 tons, but the San Francisco Chronicle says: "Scarcely any well-informed dealer in grain now figures upon more than a yield of 400,000 tons, and some very conservative operators place the total at 350,000 tons. Samples of new wheat show the grain to be badly shriveled and necessarily light weight, some of it averaging only forty pounds to the bushel. Strictly choice wheat will be decidedly scarce, and millers are even now placing orders in Oregon and Washington for their requisite supplies." Barley is a good crop in nearly all sections, but oats are light.

Snow's monthly crop report estimated the wheat crop at 725,000,000 bushels, harring further damage to spring wheat, and made the corn percentage 0.2 higher than last month. He says: "The condition of corn August 1 was 88.6, against 88.4 July 1. The situation is mixed even in the same state; in some counties a perfect prospect, and in others a low condition. In Indiana, Illinois and Nebraska the outlook is improved, but too much rain has prevented seasonable development south of the Ohio River and in portions of the Missouri Valley. Last year the condition was 87.0. The oats condition at harvest is 89.5, against 91.8 July 1."

The Ohio state report for August says that oats are reported as having been damaged by the heavy rains, and there is very general complaint of the crop being badly lodged, which will affect the filling of the heads. A few correspondents report damage by smut. The estimated condition, however, has but slightly declined during the past month, and is now reported at 91 per cent, being three points lower than reported July 1. Corn growth over the state is very uneven, as planting was irregular, but it has made rapid growth during the past month, although at the present time it is suffering for rain. The heavy wind storms have caused considerable damage, and in some lo-

calities the crop is down badly. The fields are very weedy, as cultivation has been impossible.

The government report for August says: "The crop-estimating board of the Bureau of Statistics of the Department of Agriculture finds from the reports of the correspondents and agents of the bureau as follows: The condition of corn on August 1 was 89, as compared with 87.3 last month, 87.3 on Aug. 1, 1904; 78.7 at the corresponding date in 1903 and a ten-year August average of 85.4. Preliminary returns indicate a winter wheat crop of about 424,400,000 bushels, or an average of 14.3 bushels per acre, as compared with 12.4 bushels per acre last year as finally estimated. The average condition of spring wheat on August 1 was 89.2, as compared with 91 last month, 87.5 on August 1, 1904; 77.1 at the corresponding date in 1903 and a ten-year August average of 83.3. The average condition of the oat crop on August 1 was 90.8, as compared with 92.1 last month, 86.6 on August 1, 1904; 79.5 at the corresponding date in 1903 and a ten-year August average of 83.7. The proportion of the oat crop of last year still in the hands of farmers is estimated at 6.2 per cent, as compared with 5.4 per cent of the crop of 1903 in farmers' hands one year ago, 7.4 per cent of the crop of 1902 in farmers' hands two years ago and a ten-year average of 7.2 per cent. The average condition of barley on August 1 was 89.5, against 91.5 one month ago, 88.1 on August 1, 1904; 83.4 at the corresponding date in 1903 and a ten-year average of 85.1. The average condition of flax on August 1 was 96.7, as compared with 92.7 one month ago and 78.9 on August 1, 1904. Preliminary returns indicate a decrease of 1.6 per cent in the hay acreage. The average condition of timothy hay on August 1 was 90.2, as compared with 94 on August 1, 1904, 92.2 at the corresponding date in 1903 and a nine-year average of 87.1. Reports as to the production of clover are, on the whole, favorable, the percentages in the principal states, as compared with a full crop, being as follows: New York, 93; Pennsylvania, 84; Kentucky, 89; Michigan, 99; Indiana, 97; Illinois, 98; Wisconsin, 102; Minnesota, 101; Ohio, 98, and Iowa, 95. The quality of the clover is indicated as of high medium grade."

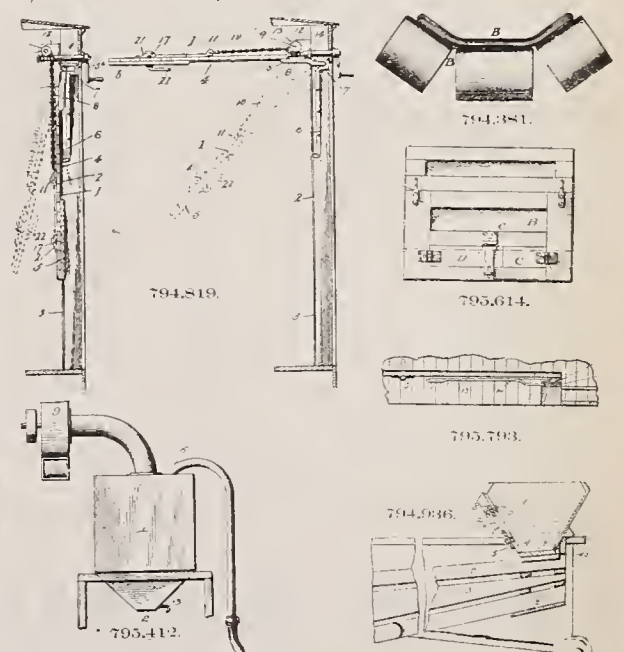
LATE PATENTS

Issued on July 11, 1905.

Conveyor Belt.—Thomas Robins, Jr., New York, N. Y., assignor to Robins Conveying Belt Co., New York, N. Y. Filed July 30, 1903. No. 794,381. See cut.

Issued on July 18, 1905.

Grain Door.—George W. Strong and George Uhlin, Rosedale, Kan., assignors of one-third to Daniel Hoagland, Rosedale, Kan. Filed November 23, 1904. No. 794,819. See cut.



Hopper for Seed-Cleaning Machines.—Jonathan Harris, Cleveland, Ohio. Filed July 21, 1904. No. 794,936. See cut.

Issued on July 25, 1905.

Pneumatic Grain Elevator.—Samuel Olson, Chicago, Ill. Filed February 6, 1905. No. 795,412. See cut.

Grain Car Door.—Xavier Hubert, Superior, Wis. Filed December 31, 1904. No. 795,614. See cut.

Grain Car Door.—Hartzell Fisher, Kansas City, Mo., assignor of one-third to E. R. Martin, Kansas City, Mo. Filed April 20, 1905. No. 795,793.

SEMI-ANNUAL STATEMENT OF THE MILL OWNERS' MUTUAL FIRE INSURANCE COM- PANY.

The sixtieth annual statement of the Mill Owners' Mutual Fire Insurance Company of Iowa has appeared over the signature of Secretary J. G. Sharp and under date of July 1. It is as follows:

Insurance in force.....\$5,521,350.00
Deposit notes 219,892.69

RECEIPTS.

Assessments\$57,036.93
Guaranty deposits 6,095.73
Interest, etc. 6,549.27 \$69,681.93

Mortgage loans repaid..... \$21,425.00
Cash in hands treas. Jan. 1, 1905 37,199.92

\$128,306.85

DISBURSEMENTS.

Losses\$42,318.26
Expenses 11,101.39
Guaranty dep. returned..... 8,449.94 \$61,869.59

Mortgage loans made..... \$20,000.00
Cash in hands treas. June 30, 1905. 46,437.26

\$128,306.85

Losses adjusted and paid since Jan. 1, 1905..... \$42,318.26
Losses adjusted (not due)..... None
Loss reported estimated..... 375.00

ASSETS.

Deposit notes subject to assessments \$219,892.69

Real estate loans, first mortgage\$144,947.10

Interest acc'd on loans (not due 2,228.39

Cash in hands treas. June 30, 1905. 46,437.26 193,612.75

\$413,505.44

LIABILITIES.

Damage reported, estimated.... \$ 375.00

Surplus over all liabilities..... \$413,130.44

STATEMENT

showing the total receipts and disbursements since the organization of the company, April, 1875.

RECEIPTS.

From all sources\$1,632,168.12

DISBURSEMENTS.

Losses\$1,098,821.81

Expenses 262,471.89

Guaranty dep. returned..... 79,415.06

Entrance fees returned..... 75.00

Real estate loans..... 144,947.10

In hands of treas. June 30, 1905. 46,437.26

\$1,632,168.12

It will be remembered that the deposit notes of this company represent the amount of but one annual premium.

Apropos the private "crop reporter," the Pope & Eckhardt Co., July 28, say: "Wheat after early strength was smashed badly by reports from crop experts. A man representing a Chicago concern, said to be bears on the market, wired from Fergus Falls, N. D., as follows: "Having inspected the fields and heard the evidence, I decide there is no black rust in the Northwest. Crops promising." How's that, for a man who has been only two or three days in the spring wheat territory? It shows that the bears know how to "make reports" as well as the other fellows. There were reports of damage as usual, but the one quoted was "the corker" that upset our market. Jones of Minneapolis put out a report claiming such serious damage as would ordinarily be regarded as sensational, but the trade here said: "We will sell on this report rather than let the Minneapolis traders fleece us again."

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

ELEVATORS

FOR SALE.

Two modern elevators, one in Minnesota, one in Iowa. Well located; easy competition, with splendid crop prospects. Inquire

81 CHAMBER OF COMMERCE, Minneapolis, Minn.

OHIO ELEVATOR.

If you are in the market to buy a good elevator in Ohio that is new, up-to-date, and that pays \$4,000 to \$5,000 per year net profit, for \$15,000, write at once, if you mean business. Address

"SNAP," Box 8, care "American Elevator and Grain Trade," Chicago, Ill.

THREE SMALL ELEVATORS.

For sale on Chicago Great Western Railway, Southern Minnesota. Well located, gasoline power, dump scales, and at stations with only one competitor. Will sell separately or together. Address

THE JOHN MILLER CO., Chamber of Commerce, Minneapolis, Minn.

FOR SALE.

Elevator in Central Illinois on I. C. R. R., with store building 40x56 and one-half block land, at Hallsville, DeWitt Co., Ill. Also will sell a general stock of goods, including a full stock of groceries, hardware, etc. Elevator is first-class in every respect; has 15,000 bushels' capacity with outside cribbing for ear corn; equipped with 14x6½ buckets; 12-horsepower Olds Engine; with 500-bushel hopper scale and gravity loading spout; will handle from 100,000 to 150,000 bushels grain yearly; one competitor. Hallsville has a nice church and school. Will sell elevator, land and store building without merchandise. This is a money-maker and a special bargain. Best reason for selling. Address

LOCK BOX 103, Clinton, Ill.

GRAIN AND SEEDS

FEED FOR SALE.

Alfalfa meal for horses, cows and hogs, \$12 per ton; fine and extra green, \$14 per ton, f. o. b.

WISE ELEVATOR, Canfield, Colo.

FOR SALE.

Recleaned rye for distillers; also mixed cars made up of grain, flour and feed. Let us hear from you.

GOSHEN MILLING CO., Goshen, Ind.

MACHINERY

FOR SALE.

The Interstate Elevator Co. having decided to equip their Erie Elevator at Chicago with electric power, we offer for sale their steam plant as follows:

Three vertical 125-horsepower Manning Boilers. One self-supporting steel stack, 5 feet diameter, 125 feet high.

One pair 16½x27-inch Automatic Buckeye Engines.

Two boiler feed pumps.

One feed water heater.

One steam-driven fire pump.

One K. W. 115-volt generator, direct connected to Ideal Automatic Engine.

There is also a line shaft about 120 feet long, running from 5 15-16 in. to 3 15-16 in., together with a large number of bracket post hangers, rope drives, complete to clippers and separators; also one large car puller, capable of pulling twenty loaded cars.

The machinery is all in first-class condition, having been run only six years; rope transmission, shafting, etc., made by Webster Mfg. Co., Chicago. Address

STEPHENS & TYLER, Monadnock Block, Chicago.

FOR SALE.

Columbus Gasoline Engine, 25-horsepower, but little used, good as new. Will be sold at a bargain. We have all sizes new and second-hand engines and are always ready to exchange or sell at low figures for cash.

WALLACE MACHINERY CO., Champaign, Ill.

FOR SALE.

Otto Gas or Gasoline Engine, 38 horsepower, good as new, but too small; now being replaced by 75-horsepower engine. Will sell cheap for cash, or a little cash and balance on time, payments to suit. Address

THE H. L. STRONG GRAIN CO., Kansas City, Mo.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

"THE STANDARD" SCALES.

For all purposes. Portable, Wagon, Hopper and Track Scales. Guaranteed durable and accurate; quality higher than price. Not in the trust.

THE STANDARD SCALE & SUPPLY CO., Station U., Chicago, Ill.

Miscellaneous & Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

SITUATIONS WANTED

SITUATION WANTED.

By young man experienced in grain, coal and lumber business; good references. Address

F. R. J., Box 17, Fontanelle, Iowa.

WANTED.

Mechanical draftsman, experienced in steel grain elevators, wants position. Address

H. H., Box 8, care "American Elevator and Grain Trade," Chicago, Ill.

GRAIN WANTED

GRAIN WANTED.

Wanted—Feed barley and new No. 2 and No. 3 rye.

W. H. SMALL & CO., Evansville, Ind.

PRICES WANTED.

The Chattanooga Brokerage Company, Chattanooga, Tenn., want prices on corn, wheat, oats and hay, and all kinds of feedstuff. Wire or write.

SEEDS WANTED.

We want to buy several cars of timothy, clover, red top, orchard and blue grass. Will buy in lots of from ten bags to carload. Send samples and quote, giving freight rate and stating quantity offered.

JAS. L. VANCE & CO., Chilhowie, Va.

HAY WANTED.

SPECIAL FACILITIES.

For handling clover mixed hay. Write for market quotations and billing instructions.

FORD B. STROUGH, Boston, Mass.

FOR GOOD RESULTS.

Ship us your next consignment of hay and straw.

R. F. MORROW COMMISSION CO., Chicago.

GOOD HAY.

Will bring a good price on our market. Send us your next consignment. Our specialty.

ST. LOUIS HAY & GRAIN CO., St. Louis, Mo.

HAY WANTED.

Our commission, 50 cents per ton. It will pay you to send for our market report.

E. K. LEMONT & SON, Bourse Bldg., Philadelphia, Pa.

THE NORTHWESTERN LINE CHICAGO TERMINALS.

A descriptive pamphlet with large scale map of its extensive and complete terminal facilities at Chicago has been prepared by the Chicago & Northwestern Railway. This will be of interest to industrial concerns located on these terminal lines, and more especially to those seeking new sites with adequate railway conveniences. Send for free copy to Industrial Department, C. & N. W. Ry., Chicago, Ill.

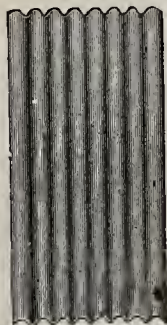
FOR SALE

Paxton Mill,	-	Harrisburg, Pa.	1,200 bbls.
Swartley Mill,	-	Doylestown, Pa.	120 "
Mingle-Fulmer Mill,	-	Hatboro, Pa.	100 "
Gochner Mill,	-	Boiling Springs, Pa.	100 "
Columbia Mill,	-	Columbia, Pa.	150 "
Loucks-Codorus Mill,	-	York, Pa.	125 "
Freed Mill,	-	North Wales, Pa.	100 "

C. H. DEMPWOLF, YORK, PA.

ROOFING AND SIDING.**SYKES STEEL ROOFING CO.**

611 So. Morgan Street, Chicago

**MAKERS OF FIREPROOF WINDOWS**

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

ESTABLISHED 1886

Flour and Wheat Testing.

Howard's Wheat and Flour Testing Laboratory furnishes quick and accurate practical tests of wheat and flour.

Daily Comparative Baking Tests in comparison with the leading mills of the United States and Canada, Wheat Milling Tests and Chemical Analyses at prices within reach of any miller.

Schedule of rates and terms, including list of various tests, sent on application.

A. W. HOWARD, Old Colony Bldg., Minneapolis, Minn.

FREMONT**Nye, Schneider, Fowler Co.
GRAIN DEALERS**

Corn for Feeders. Milling wheat a specialty, both winter and spring. Write for samples and prices. Shipment via C. & N. W. R. R.

General Offices - - - FREMONT, NEB.

GRAIN RECEIVERS**PITTSBURG****D. G. STEWART & GEIDEL**

SUCCESSORS TO

D. G. Stewart and Geidel & Co.

PITTSBURG, PA.

WHOLESALE DEALERS IN

GRAIN, HAY and MILL FEED

Proprietors Iron City Grain Elevator
CONSIGNMENTS SOLICITED

C. A. FOSTER

Grain Exchange Building, Cor. Penn
Ave. and Tenth St., Pittsburgh, Pa.

Established 1878

Wholesale Grain, Hay and Mill Feed

CONSIGNMENTS SOLICITED

References: The Colonial Trust Co., Pittsburgh, Pa.

HAY

The Best Market in the World

Our superior facilities and connections with large buyers of HAY and GRAIN enable us to get the best prices. Liberal advances made on shipments.

Daniel McCaffrey's Sons Co.
Pittsburg, Pa.

References: Duquesne National Bank.
Washington National Bank.

In the one spot 38 years.

GRAIN

N. MORTON

RECEIVER AND SHIPPER

GRAIN, HAY AND FEED

Consignments Solicited

Member: National Hay Association; Pittsburg Grain and Flour Exchange.

207 Grain Exchange Bldg., Pittsburgh, Pa.
Reference, Monongahela National Bank

HARDMAN & HECK

Room 303, Second Nat. Bank Bldg.,
PITTSBURG, PA.

Grain, Hay and Mill Feed

Careful personal attention given to any business you may give us.

CORRESPONDENCE SOLICITED

H. G. MORGAN & CO.

Receivers and Shippers

HAY, GRAIN and MILL FEED

203 Bissell Block

Pittsburg, - Pa.

INDIANAPOLIS**The Wm. S. Gilbreath Seed Co.**

WHOLESALE

FIELD SEED MERCHANTS

INDIANAPOLIS, IND.

Buyers and sellers of Field Seeds will do well to correspond with us; we handle in large quantities:

Red Clover, White Clover, Red Top, Hungarian, Kaffir Corn,
Timothy, Alfalfa, Orchard Grass, Dwarf Essex Rape, Peas,
Alsike, Blue Grass, Millets, Cane,

Send us your samples or ask for ours

New 'Phone 4313

Old 'Phone 4380

Robinson's Cipher

NATIONAL GRAIN & HAY CO.

Grain, Hay, Flour and Feed Commission

Top Market Prices—Quick Returns

46 Board of Trade,

INDIANAPOLIS, IND.

MILWAUKEE**MILWAUKEE ELEVATOR CO.**

GENERAL GRAIN DEALERS
AND BUYERS

BARLEY A SPECIALTY

61-66 Mitchell Building. Milwaukee, Wis.

O. MOHR, Mgr.

G. C. HOLSTEIN, Sec'y-Treas.

Mohr-Holstein Commission Co.

29 Chamber of Commerce

MILWAUKEE

Sample Grain a Specialty

BRANCH OFFICES AT CHICAGO, MINNEAPOLIS

ESTABLISHED 1864

I. H. Lowry & Co.

64 Mitchell Building, MILWAUKEE, WIS.

GRAIN COMMISSION MERCHANTS

Branch Offices at CHICAGO, MINNEAPOLIS

We solicit your consignments

DETROIT

A. S. DUMONT

R. C. ROBERTS

A. E. O'DONNELL

Dumont, Roberts & Co.

RECEIVERS GRAIN SHIPPERS

Chamber of Commerce

DETROIT, MICH.

Merchants Exchange

DECATUR, ILL.

Consignments Solicited.

Ask for our Bids and Quotations.

CAUGHEY & CARRAN

DETROIT, MICH.

Grain and Seed Merchants and Commission

OUR SPECIALTY: OATS AND CLOVER SEED

We handle Beans, Barley, Rye, Corn, Wheat. Try us. Liberal advances.

OFFICES: 620 to 624 Chamber of Commerce

ELEVATOR and SEED HOUSE: Corner 14th and Baker Sts.

L. A. PARSONS

H. M. HOBART

Parsons & Hobart

GRAIN, BEANS and HAY

CONSIGNMENTS SOLICITED

Elevator: M. C. R. R. and Trumbull Avenue

Office: 406 Chamber of Commerce

DETROIT, MICH.

PHILADELPHIA

ESTABLISHED IN 1863

E. L. ROGERS & CO.

Receivers and Exporters

Commission Merchants

Grain, Feed, Hay, Straw, Etc.

358 Bourse Building

PHILADELPHIA, PA.

L. F. MILLER & SONS,

RECEIVERS AND SHIPPERS OF

Grain, Feed, Seeds, Hay, Etc.

OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED. Special attention given to the handling of CORN AND OATS.

REFERENCES: Manufacturers' National Bank, Philadelphia, Pa.; Union National Bank, Westminster, Md.

GRAIN RECEIVERS

CHICAGO

E. GERSTENBERG

A. GERSTENBERG

Gerstenberg & Co.

Commission Merchants

HANDLE ALL GRAINS AND SEEDS

Barley a Specialty

OUR SERVICE WILL PLEASE YOU
CHICAGO

ESTABLISHED 1852

T. D. RANDALL & CO.

COMMISSION MERCHANTS
HAY, GRAIN AND FLOUR

92 Board of Trade Bldg., CHICAGO

CHICAGO

H. HEMMELGARN.

P. H. SCHIFFLIN.

H. HEMMELGARN & CO.,

COMMISSION
MERCHANTS.

Grain, Seeds and Provisions.

Orders for futures carefully executed.
Consignments and correspondence solicited.515-518 Postal Telegraph Bldg. 44-46 Chamber of Commerce,
CHICAGO. PEORIA.

W. H. MERRITT & CO.

Grain Buyers and Shippers

CORRESPONDENCE SOLICITED

87 Board of Trade, CHICAGO, ILL.

CHICAGO

Good Prices

Prompt Returns

Very Best Attention

and **W. A. FRASER CO.**

"They're Running Mates"

MINNEAPOLIS

CHICAGO

MILWAUKEE

POPE AND ECKHARDT CO.,

COMMISSION MERCHANTS

GRAIN
SEEDS
PROVISIONS

317-321 Western Union Building,

CHICAGO.

WILLIAM J. POPE, Pres.
W. N. ECKHARDT, Secy.

J. ROSENBAUM GRAIN CO.

(INCORPORATED)

GRAIN MERCHANTS
CHICAGO

RUMSEY & COMPANY

COMMISSION MERCHANTS

GRAIN, HAY, SEEDS AND PROVISIONS

CASH AND FUTURE DELIVERIES

97 BOARD OF TRADE, CHICAGO

Receiving a Specialty

Every Department Fully Manned by Men of Ability and Long Experience

WRITE FOR MY "Grain Trade Talks"

Edward G. Heeman

GRAIN AND PROVISIONS,
STOCKS, BONDS, COTTON AND COFFEE,
159 LaSalle St., Rotunda National Life Building,
Member Chicago Board of Trade. CHICAGOCOMMISSION MERCHANT ONLY,
Doing no trading whatever on my own account, enables me to
judge the market from an unbiased standpoint.All business transacted through and confirmed by Chas. W. Gillett.
My "GRAIN TRADE TALKS" are published in full in the Chicago Evening Post
and Chicago Journal. Will send either paper free to customers.

E. W. WAGNER,

MEMBER CHICAGO BOARD OF TRADE.

PERSONAL ATTENTION GIVEN

Speculative Accounts
and Consignments.

Market letter mailed free on application.

99 Board of Trade Bldg., Chicago, Ill.

J. H. WARE E. F. LELAND
O. W. LEE F. J. FAHEYConsign your grain and seeds and send your
Board of Trade Orders to

WARE & LELAND,

400-410 Postal Telegraph Bldg., Chicago.

GRAIN, PROVISIONS,
STOCKS AND COTTON.

Write for our Daily Market Letter.

Your interests are our interests.

Special attention given to cash
grain shipments.

THE GLUCOSE SUGAR REFINING CO.

General Offices

The Rookery

Chicago

FACTORIES:

Chicago, Ill.

Peoria, Ill.

Waukegan, Ill.

Rockford, Ill.

Pekin, Ill.

Venice, Ill.

Marshalltown, Ia.

Davenport, Ia.

Geneva, Ill.

BUYERS OF CORN

Consumption 165,000 bushels daily

JOS. P. GRIFFIN, Manager Grain Department

GRAIN RECEIVERS

CHICAGO



We Have

every facility for handling grain on consignment or for future delivery.

Experienced Men on 'Change
Ample Financial Resources
Thirty Years' Experience

COMMISSION MERCHANTS

77 Board of Trade

AUTHORIZED CAPITAL \$500,000.00

The Calumet & Western Elevator Company

GENERAL GRAIN HANDLERS

Careful Attention Consignments and Future Orders

"Chicago Evening Post" containing our daily market letter mailed you if desired.

169 JACKSON BOULEVARD, CHICAGO

William H. Lake Jno. A. Rodgers Edw. P. McKenna

W. H. LAKE & CO.

Commission Merchants

Grain, Provisions, Stocks

6 Sherman Street - CHICAGO

MEMBERS: Chicago Board of Trade; Chicago Stock Exchange; New York Produce Exchange; St. Louis Merchants' Exchange; Milwaukee Chamber of Commerce.

F. E. WINANS

Grain and Field Seeds Commission Merchant

BARLEY, OATS, WHEAT, CORN, RYE
TIMOTHY, CLOVER, FLAX, HUNGARIAN MILLET

6 SHERMAN STREET, CHICAGO

Write us freely on all matters pertaining to grain and field seeds. Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

E. W. BAILEY & CO.

Commission Merchants

GRAIN, SEEDS AND
PROVISIONS

72 Board of Trade, CHICAGO

ARMOUR GRAIN CO.

205 LA SALLE STREET

CHICAGO

GRAIN BUYERS AND DEALERS

W. F. JOHNSON

GEO. A. WEGENER

W. F. JOHNSON & CO.

GRAIN, SEED AND PROVISION

Commission Merchants

Orders for future delivery carefully executed.
Consignments and correspondence solicited.

Room 59, Board of Trade

CHICAGO

H. H. FREEMAN & CO.

Long Distance
Telephone, 3339 Harrison

HAY,
STRAW
and GRAIN.

COMMISSION MERCHANTS

Correspondence and Consignments Solicited. Market Reports on Application. 66 BOARD OF TRADE, CHICAGO, ILL.

CHICAGO

A. L. SOMERS, Pres. CHAS. A. JONES, Sec'y and Treas.

SOMERS, JONES & CO.

(Incorporated)

COMMISSION MERCHANTS

544-545 Postal Telegraph Bldg., CHICAGO

GRAIN AND FIELD SEEDS

CONSIGNMENTS AND ORDERS FOR FUTURE DELIVERY SOLICITED. :: LIBERAL ADVANCES ON CONSIGNMENTS

H. M. PAYNTER

GRAIN COMMISSION

Special attention given consignments of grain and seeds.

Orders in futures carefully executed.

5 and 7 Board of Trade, Chicago.

All business transacted through and confirmed by Milmine, Bodman & Co.

W. J. THOMPSON & CO.

Successors to
B. S. SANBORN & CO.
Members Chicago Board of Trade

Commission Merchants

GRAIN - SEEDS - HAY

Consignments and orders for futures solicited.

263-265 La Salle Street
CHICAGO

WRIGHT, BOGERT & CO. COMMISSION MERCHANTS

Correspondence and Consignments Solicited
Orders for future delivery carefully executed

Screenings and Mill Feed

306-308 Postal Telegraph Building
CHICAGO

WARNER & WILBUR, GENERAL COMMISSION MERCHANTS

CONSIGNMENTS AND ORDERS IN FUTURES SOLICITED

417 and 419 Royal Insurance Building

Established 1879

CHICAGO, ILL.

UPDIKE COMMISSION CO.

Grain and Provisions

No. 120 Rialto Building, CHICAGO

Consignments Given Special Attention

Correspondence Solicited

J. C. Shaffer & Co.

Buyers and Shippers

— of Grain —

240 La Salle St. Chicago

HULBURD, WARREN & CHANDLER

Stock Brokers and Commission
Merchants, Grain and Provisions

Business Solicited in any Department. Receiving,
Shipping, Futures.

212-214 La Salle St., CHICAGO

CHICAGO

Members

CHICAGO
BOARD
OF TRADE

CHICAGO
STOCK
EXCHANGE



Ground Floor

112

La Salle St.

VON FRANTZIUS & CO.

ASK FOR OUR STATISTICAL CARDS

BUFFALO

W. W. ALDER

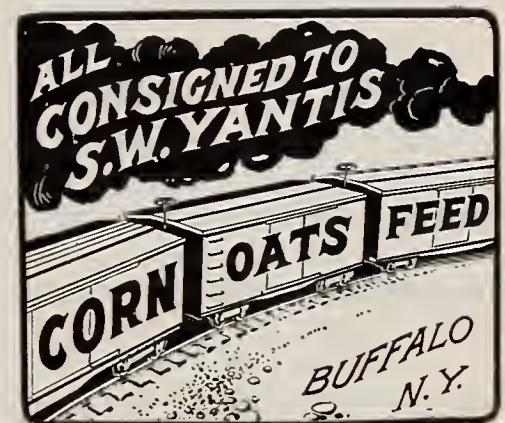
T. J. STOFER

Alder & Stofer

COMMISSION
MERCHANTS

We do not buy any grain, but handle on commission, and solicit your Buffalo consignments.

83 Chamber of Commerce,
BUFFALO - NEW YORK



Consign Your Grain to BURNS BROS.

44 Board Trade, Buffalo, N. Y.

QUICK SALES. IMMEDIATE RETURNS. RELIABLE REPORTS.
Members Grain Dealers National Association.

HANDLES ALL KINDS OF GRAIN

Established 1892

W. E. LEE

49 Chamber of Commerce, Buffalo, N. Y.

BARLEY A SPECIALTY
BUYS OR SELLS ON CONSIGNMENT

DUDLEY M. IRWIN

BARLEY

69-70-71 Chamber of Commerce, Buffalo, N. Y.

GRAIN RECEIVERS

TOLEDO

ESTABLISHED 1846

C.A. KING & CO.

THE GOLDEN RULE

GRAIN AND CLOVER SEED DEALERS
OF TOLEDO, OHIO

SPECIAL MARKET AND CROP REPORTS FREE

BE FRIENDLY

WRITE OCCASIONALLY

J. J. COON

GRAIN, SEEDS AND FEED

61 Produce Exchange

TOLEDO, OHIO

CONSIGNMENTS SOLICITED CASH AND FUTURES

REYNOLDS BROS.

TOLEDO, O.

Buy and Sell Grain

SELL US YOURS

If you don't get our bids, ask for them. Consignments always welcome. Consign us yours.

J. F. ZAHM

F. W. JAEGER

F. MAYER

ESTABLISHED 1879

J. F. ZAHM & CO.

GRAIN and SEEDS

TOLEDO, OHIO

Handling consignments and filling orders for futures

OUR SPECIALTY

SEND FOR OUR DAILY CIRCULAR; IT'S FREE

ST. LOUIS

CONNOR BROS. & CO.

GRAIN AND HAY

ST. LOUIS

MEMBERS OF GRAIN DEALERS' NATIONAL ASS'N

PEORIA

ESTABLISHED 1875

P. B. & C. C. MILES

Grain Commission Merchants

BUYERS AND SHIPPERS

36-37 Chamber of Commerce, PEORIA, ILL.

T. A. GRIER & CO.

PEORIA, ILL.

RECEIVERS, BUYERS AND SHIPPERS
OF WHEAT, CORN, OATS AND RYEOn account of the peculiar character of the season, grain
is largely off grade and we advise consignments.

WE GIVE ALL CONSIGNMENTS CAREFUL ATTENTION

A. G. TYNG, Jr.

D. D. HALL

TYNG, HALL & CO.

Grain and Commission
Merchants

ROOMS 33 AND 35 CHAMBER OF COMMERCE

PEORIA, ILLINOIS

Van Tassell Grain Company

GRAIN COMMISSION MERCHANTS

BUYERS and SHIPPERS

43 AND 45 CHAMBER OF COMMERCE
PEORIA, ILLINOIS

LANCASTER

DO YOU REALIZE

That country trade always pays you
best in every way?We work a large country business.
See the point?

JONAS F. EBY & SON, LANCASTER, PA.

MINNEAPOLIS



F.H. PEAVEY & CO.

MINNEAPOLIS,

GRAIN RECEIVERS

MINN.

Consignments Solicited.

MILLING WHEAT A SPECIALTY

J. R. MARFIELD, Pres.

Wm. GRIFFITHS, Vice-Pres. and Mgr.

C. D. TEARSE, Sec'y and Treas.

MARFIELD-GRIFFITHS CO.

GRAIN COMMISSION

OFFICES:
CHICAGO
MINNEAPOLISMILWAUKEE
DULUTHConsignments and Orders for
Future Delivery Solicited.

PRIVATE WIRES-CHICAGO AND NEW YORK

511-514 New Chamber of Commerce, Minneapolis, Minn.

KANSAS CITY

Geo. A. Adams Grain Co.

KANSAS CITY, MO.

Consignments and orders for
future delivery solicited

Milling Wheat a Specialty

BATTLE CREEK

McLane, Swift & Co.,

Buyers
of

GRAIN

Battle Creek,
Mich.

CORRESPONDENCE FROM EASTERN BUYERS SOLICITED.

CLEVELAND

THE UNION ELEVATOR CO.

BUYERS AND SHIPPERS

WHEAT, CORN, OATS, HAY AND STRAW

OUR SPECIALTY: RECLEANED ILLINOIS SHELLLED CORN
CLEVELAND, O.

NEW YORK CITY

BROOKLYN HAY & GRAIN CO.

HAY, STRAW AND GRAIN

COMMISSION MERCHANTS

ON ALL MARKETS IN NEW YORK HARBOR

Office: Borough of Brooklyn, New York

GEO. N. REINHARDT & CO.

MELROSE STATION, NEW YORK CITY

Geo. N. Reinhardt & Co.

DEALERS IN
HAY, STRAW & GRAIN

We sell on Commission and buy direct.

HAY, GRAIN AND FEED.

Storage capacity 8,000 bales, 30,000 bushels.
Let us know what you have to offer.

WIRE, WRITE or PHONE

UNITED GRAIN COMPANY

CHICAGO, ILL. SOUTH BEND, IND.

TOLEDO, O.

BUFFALO, N. Y.

Successor to Churchill & Company; The Paddock-Hodge Company; The Churchill-White Grain Company.

We buy delivered either of these points, or f. o. b. your stations. Fireproof elevators and seed houses.
Unlimited storage capacity for grain and seed. Storage capacity, 6,000,000. Unloading capacity, 300 cars daily.

Clipping Capacity, 175,000 Daily. We trade in futures.

CAIRO

H. L. Halliday Milling Co.

RECEIVERS AND SHIPPERS

CORN-WHEAT-OATS

CAIRO,

ILLINOIS

CINCINNATI

The METZGER-HILL CO.

Grain-Hay

Receivers

Shippers

CINCINNATI

OHIO

We Go Anywhere For Business



There are Wolf elevators and mills in practically every part of the United States and Mexico, and wherever you find Wolf Machinery you will find a satisfied miller or elevator man.

We have agents at Philadelphia, Nashville, Tenn., Minneapolis, Minn., Portland, Ore., and Mexico City, Mex.

Our representatives at these convenient central points will gladly give any information or, if necessary, visit any plant personally and submit estimates and plans without charge.

Our estimates will prove to you that we make

LOWEST PRICES

on all kinds of Power-Transmitting, Elevating and Conveying Machinery—and we believe our machinery is simpler, more durable and more economical than any other on the market.

May we be of service to you?

The Wolf Company

BOX 538

Chambersburg, Pa.

Philadelphia Branch Shops, 521 N. 23d St., Philadelphia, Pa.

GENERAL SOUTHERN OFFICE: 505 Willcox Bldg., Nashville, Tenn.
GENERAL NORTHERN OFFICE: 309 S. Third Street, Minneapolis, Minn.
PACIFIC COAST DEPARTMENT: 323 Alisky Bldg., Portland, Oregon

Grain Insurance

at short rates means from 20 to 140 per cent more than the pro-rata cost for the same length of time. Such an extra charge is a heavy load for the accommodation of a short term policy.

You Can Do Better
With The



That company will not charge over pro rata, and for policies held longer than three months, makes an increasing dividend.

For particulars address

C. A. McCOTTER
Secretary

MILL OWNERS'

MUTUAL FIRE INSURANCE

COMPANY

DES MOINES, IOWA

Insures Mills, Elevators, Warehouses
and Contents.

Oldest Flour Mill Mutual in America

SAVED TO MEMBERS
OVER \$1,300,000

J. G. SHARP, Secretary

INSURANCE

ON GRAIN ELEVATORS
AND CONTENTS

Is furnished at cost by the

MILLERS' NATIONAL INSURANCE Co.
of Chicago

It is a Mutual Company which insures more mills and grain elevators than any other company in the United States.

It has been in business 27 years and its average annual cost for insurance to mutual policyholders has been about one-half of the board rates of stock companies.

It had admitted assets, January 1, 1903, of \$3,380,676.56, and a net cash surplus over all liabilities of \$466,594.95. Losses paid, \$3,939,221.28.

The same conservative management which has directed the Company's affairs all through its prosperous existence will be continued.

Before placing your insurance, write to the Company at No. 205 La Salle Street, Chicago, for a copy of the circular and statement, which fully explains the Company's method of insuring your class of property on the mutual plan. If your risk is up to the required standard you cannot afford to insure in any other company.

W. L. BARNUM Secy.

Millers' Mutual Fire Insurance Association of Illinois

ALTON, ILL.

Good, but cheap, insurance on Elevators,
Mills, Grain Warehouses and their
Contents.

We make a specialty of writing Grain
that you carry for a short term.

Premium Notes in Force, \$1,200,000.00
Cash Surplus, . . . 225,000.00

A. R. MCKINNEY, Secretary.

H. D. CUMMINGS & CO.,
159 La Salle Street, Chicago Agents.

\$2.50 American Miller
AND
American Elevator
and Grain Trade
FOR ONE YEAR

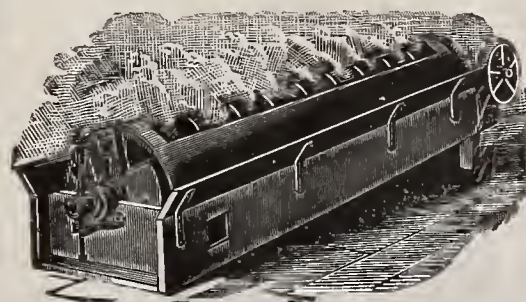
Insurance on Elevators and Grain!

During 23 Years of Successful Business We Have Furnished
Our Members the Most Reliable Insurance at about Half the Rates
which Stock Insurance Companies have charged during the same period.

We Have--Paid \$1,000,000.00. Total \$1,250,000.00. Net Cash \$250,000.00.
Losses Assets Surplus

Michigan Millers Mutual Fire Insurance Co.
OF LANSING, MICHIGAN.

WHY NOT USE THE ORIGINAL CUTLER STEAM DRYER,



Which is also a successful

Wheat Heater or Temperer
or Dryer for Washed
Wheat or Bran.

It leaves the Wheat in Perfect Condition for the Rolls. Will also dry
Malster's, Brewer's and Distiller's Wet Grain.

Not an Experiment. In successful use 25 years drying
CORN MEAL AND HOMINY,

BREWERS' GRITS AND MEAL,

BUCKWHEAT, RICE AND

ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE AND CLAY AND ORE OF ALL KINDS!

Automatic in operation, requiring no attention. Double
the capacity of any other Dryer sold for same price.

THE CUTLER CO., North Wilbraham, Mass.

MACDONALD ENGINEERING CO.

ENGINEERS AND CONTRACTORS



650,000-Bushel Steel Elevator, under construction.
This bin story was erected in 30 working days.

**Builders of Grain Elevators
in Wood, Steel, Concrete or
Combination Materials.**

549-51-52-53 Monadnock Building, Chicago, Ill.

JOHN S. METCALF CO.

ENGINEERS—GRAIN ELEVATOR BUILDERS

We make a Specialty of Furnishing
Plans and Specifications.

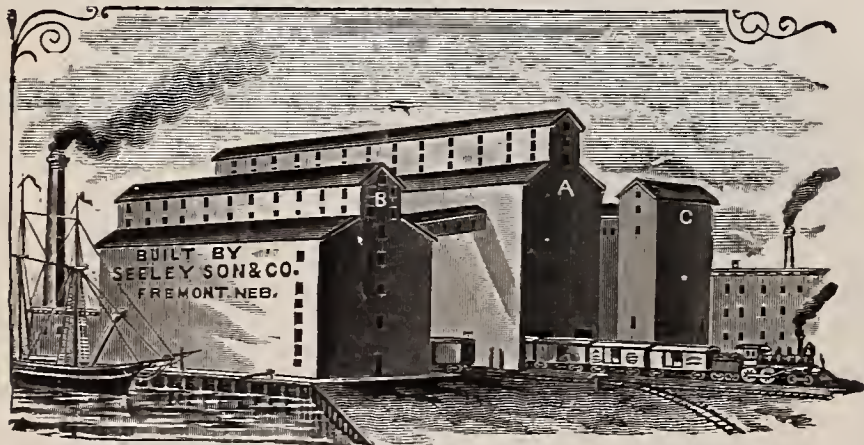
619-623 The Temple, Chicago, Ill.

A partial list of elevators which have been designed and constructed
by us and under our supervision. Bushels.

MANCHESTER SHIP CANAL CO.'S ELEVATOR, Manchester, Eng.	1,500,000
GRAND TRUNK ELEVATOR No. 3, Portland, Me.	1,500,000
GRAND TRUNK ELEVATOR No. 2, Portland, Me.	1,000,000
NORTHERN GRAIN CO., Manitowoc, Wis.	1,400,000
BURLINGTON ELEVATOR, St. Louis, Mo.	1,300,000
UNION ELEVATOR, East St. Louis, Ill.	1,100,000
EXPORT ELEVATOR, Buffalo, N. Y.	1,000,000
J. R. BOOTH ELEVATOR, Parry Sound, Canada.	1,000,000
CHESAPEAKE & OHIO RAILWAY ELEVATOR, Newport News, Va.	1,000,000
SOUTHERN PACIFIC TERMINAL CO.'S ELEVATOR, Galveston, Tex.	1,000,000
BURLINGTON ELEVATOR, Peoria, Ill.	500,000
CANADA ATLANTIC RAILWAY ELEVATOR, Coteau Landing, Que.	500,000
HALLIDAY ELEVATOR CO.'S ELEVATOR, Cairo, Ill.	500,000
PERE MARQUETTE RAILROAD CO.'S TRANSFER ELEVATOR, Ludington, Mich.	150,000
GRAND TRUNK TRANSFER & CLIPPING ELEVATOR, Chicago, Ill.	100,000
MISSOURI PACIFIC CONCRETE & WOOD ELEVATOR, Kansas City.	1,000,000
GOEMANN GRAIN CO.'S TRANSFER ELEVATOR, Mansfield, Ohio.	100,000
GEO. T. EVANS MILLING CO.'S CONCRETE ELEVATOR, Indian- apolis	85,000

SEELEY, SON & CO.,

Fremont, Neb.



Architects and Builders

OF ALL KINDS OF

GRAIN ELEVATORS.

Witherspoon - Englar Company

*Designers and Builders
of*

Fireproof Grain Elevators

Designs and Estimates promptly
furnished for all kinds of build-
ings for the handling and storage
of grain in any locality.

630 Monadnock Bldg., CHICAGO

COMPLETE

Grain Elevators and Flour Milling Plants

Designed, erected and equipped ready for operation.
PLANS drawn to suit any location and ESTIMATES
SUBMITTED. Elevators built in either steel, wood
or combination materials.

STEEL FIREPROOF ELEVATORS A SPECIALTY

Write for my late Illustrated Catalog on Grain Elevators.
It will interest you. *Correspondence Solicited*

R. C. STONE

Architect and Mechanical Engineer

Springfield, Mo.

Riter-Conley Mfg. Co.,

Manufacturers,
Engineers,
Contractors.

Grain Elevators of Steel,

ALSO

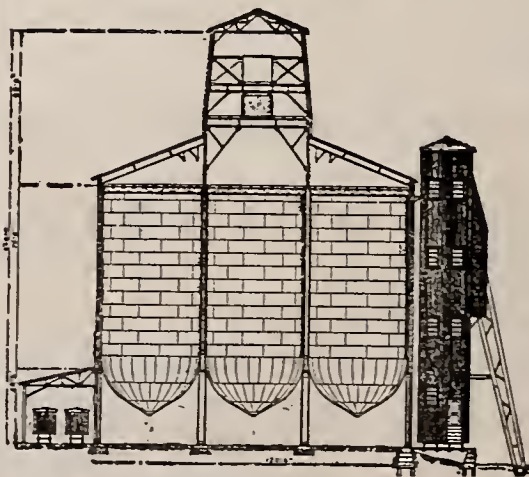
Gas Holders with Steel Tanks

Water and Oil Tanks,
Steel Buildings,
Steel Stacks and
Steel Construction of
Every Description.

Designed, Furnished and Erected
in All Parts of the World.

General Office, Water Street, Pittsburg.
New York Office, Trinity Building,
111 Broadway.

LONG-DISTANCE TELEPHONE CONNECTIONS



Cross-section of Great Northern Elevator furnished by
us at Buffalo, N. Y. Three million bushels' capacity.
Steel throughout.

James Stewart & Co.

CONTRACTORS

Grain Elevator Department

1811 FISHER BUILDING

CHICAGO

W. R. SINKS, Mgr. R. H. FOLWELL, Engr.

We are prepared to design and build Grain Elevators, any place, of

STEEL BRICK WOOD
CONCRETE TILE

We also do general contracting, and have offices in the following cities.

Write or call on any of them.

NEW YORK, 130-137 Broadway ST. LOUIS, MO., Lincoln Trust Bldg.
BALTIMORE, MD., 319 N. Charles St. NEW ORLEANS, LA., Hibernia Bank Bldg.
PITTSBURGH, PA., Westinghouse Bldg. LONDON, ENGLAND, Savoy Hotel

G. T. HONSTAIN

Successors to HONSTAIN BROS., Contractors and Builders of

GRAIN ELEVATORS



Exchange Elevator built by G. T. Honstain, Minneapolis.
Fireproof storage capacity 250,000 bushels.
Working house capacity 150,000 bushels.

518 Corn Exchange Bldg.
MINNEAPOLIS, MINN.

Nebraska City & Ill. Ele. Co.
Chicago, 2,000,000
Bartlett, Frazier Co.
Chicago, 1,000,000
H. Rogers Co.
St. Louis, 500,000
F. H. Peavey & Co.
Minneapolis, 1,000,000
S. S. Linton & Co.
Minneapolis, 650,000
S. S. Linton & Co.
Minneapolis, 450,000
Interstate Grain Co.
Minneapolis, 500,000
City Elevator Co.
Minneapolis, 400,000
Security Grain Co.
Minneapolis, 400,000
Royal Milling Co.
Great Falls, Mont., 100,000
Jennison Bros.
Janesville, Minn., 100,000
Four hundred country elevators from 10,000 to 50,000.

The BARNETT & RECORD CO.

416 CORN EXCHANGE, MINNEAPOLIS, MINN.

General Contractors and Designers of Grain Elevators, Mill Buildings, Docks and Warehouses.

We are prepared to use all of the various kinds of elevator construction, but recommend our special construction known as the Record-Johnson System Patent Fireproof Semi-Porus and Glazed Cellular Tile Grain Storage Construction, covered by the following patents and which we have exclusive control: Patents Nos 664323, 664324, 664325, 692544, 713104.



The following is a partial list of owners and capacity of plants which we have built in the last four years under these patents:

	Bushels.		Bushels.
Great Eastern Elevator, Minneapolis,	1,000,000	Northwestern Yeast Co., Chicago,	300,000
St. Anthony Elevator Co., "	2,200,000	Canadian Northern Ry. Co., Port Arthur,	2,250,000
North Star Malting Co., "	500,000	David Stott Milling Co., Detroit,	200,000
Victoria Elevator Co., "	250,000	Pabst Brewing Co., Milwaukee,	250,000
Frisco Ry. Elevator, Kansas City,	700,000		

We have under construction at the present time the following plants:
Schlitz Brewing Co., Milwaukee, 550,000 Texas City Imp. Co., Texas City, Tex., 500,000
Washburn-Crosby Milling Co., Buffalo, 300,000 Millbourne Mills Co., Philadelphia, 200,000

The following are a few of our largest wood-constructed elevators:

Calumet Elevator, Chicago,	1,000,000	Maple Leaf Elevator, Kansas City,	1,000,000
Minnesota Annex, Chicago,	1,000,000	Burlington Elevator, St. Louis,	1,000,000
C. St. P. M. & O. Ry. Co., Itasca,	1,125,000	Grand Trunk Elevator, Portland, Me.,	1,000,000
Belt Line Elevator, Superior,	2,500,000	F. H. Peavey & Co., No. 1,	1,750,000
Superior Terminal, Superior,	2,500,000	Interstate Elevator, Minneapolis,	1,000,000
Pittsburg & West Ry., Fairport, O.,	1,000,000	Texas Pacific Ry. Co., Westwego, La.,	1,000,000
United States Milling Co., Duluth,	1,000,000	Hoosac Tunnel, Charlestown,	1,000,000
Empire Elevator Co., Minneapolis,	2,500,000	And hundreds of smaller houses.	

WRITE US FOR ESTIMATES

IT'S WORRY THAT KILLS

Don't kill yourself by worrying over your proposed new elevator.

LET US HELP YOU OUT

of your troubles by designing and building your elevator. You will be money ahead and so will we.

IT WOULD PAY YOU

to have our representative call. Let us have the worry; we live on it.

BURRELL ENGINEERING & CONSTRUCTION CO.

263-265 La Salle Street, CITY



S. H. TROMANHAUSER

DESIGNER and BUILDER

Grain Elevators

Fireproof
Brick
Construction
A Specialty

Country or Terminal Elevators
in any Design or Capacity

Write for Plans and Estimates

805-6 Phoenix Bldg.
MINNEAPOLIS, MINN.



E. A. BRYAN CO.



Designers and Builders of Any Kind of
STEEL ELEVATORS

Chicago Office:

1018 First National Bank Bldg.

Works:
Harvey, Ill.

On Belt Line connecting with
all Chicago Railways.

STEEL STORAGE and ELEVATOR CONSTRUCTION COMPANY BUFFALO, N. Y.



1,000,000-bushel fireproof Grain Elevator constructed of steel, for the Harbor Commissioners of Montreal, Canada.

**Twenty Million Bushels Capacity of Our Construction
Now in Use.**

NOTHING TOO LARGE

NOTHING TOO SMALL

ARE YOU GOING TO BUILD?

IF SO, WRITE

**Younglove & Bogges Co.
ENGINEERS**

Designers and Builders of Grain
Elevators and Flour Mills

MASON CITY, IOWA

We will be pleased to send you plans,
specifications and estimates on your work.

FRED FRIEDLINE

Architect and
Engineer

503 Traders Building
CHICAGO, ILL.

Local and Long Distance
Phone Harrison 667.

CONTRACTOR



Grain Elevators, Large or Small, Country or Transfer,
of Wood or Fireproof Construction.

COMPLETE Milling Plants, Power Plants and Heavy Construction. Plans
and Specifications a Specialty. Correspondence Invited.

OLSON, ENGH & CO.

ENGINEERS and CONTRACTORS
DESIGNERS and BUILDERS

Telephone, Monroe 1614

160-162 N. Sangamon Street, CHICAGO, ILL.

Modern Grain Elevators
ANY STYLE AND CAPACITY
DESIGNED AND BUILT BY
L. O. HICKOK 201 Flour Exchange,
MINNEAPOLIS, MINNESOTA

DO YOU INTEND To Build or Remodel Your Elevator?

If so, write me for plans and estimates.

Elevator machinery and supplies carried in stock for immediate delivery.
Write for catalogue and prices.

FRED GROTENRATH,

111 W. Water Street,

MILWAUKEE, WIS.



ELEVATOR OF WINONA MALTING CO.
Built by Minneapolis Steel and Machinery Company.

Minneapolis Steel and Machinery Co.

MINNEAPOLIS, MINNESOTA

Builders of

Steel Elevators

Corliss Engines

*Elevating, Conveying and Power
Transmitting Machinery*

STEEL STRUCTURES

Barnard & Leas Mfg. Co.

Designers and Builders of

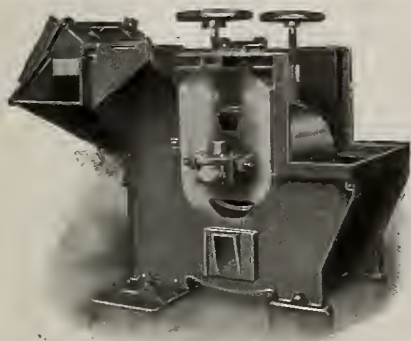
ELEVATORS IN WOOD, STEEL *and* CONCRETE

Plans and specifications for Elevators of all kinds and capacities furnished
Write for further particulars

MOLINE



ILLINOIS



16-inch pulley—16-inch face.
NON-CHOKING.

SEND FOR
Catalogue "D"

HALL DISTRIBUTOR CO.

222
First Nat. Bank Bldg.
Omaha, Neb.

HALL NON-CHOKABLE BOOT

Marks the highest point in efficiency that has ever been reached in elevating grain.

READ THIS:

"I am now doing the work with **ONE LEG** that required three previous to the installation of your machinery. They need no watching, and I find they cannot be choked. While I have increased the size of the buckets over those formerly used, I can run new leg with less power, less labor and there is no loss of time through chokes and no slopping of grain so common in country elevators. We remain

Yours truly,
"Beecher, Ill., Jan. 7, '05. F. CLOIDT CO."
What this Boot has done for the Cloidt Co. it will do for you.

SENT ON TRIAL.

H. G. BUSHNELL CO.

314 CORN EXCHANGE : : MINNEAPOLIS, MINN.

Modern Elevators - - Reasonable Prices

Send for copy of our new design 15,000-bu. Cribbed Elevator. Cost, about \$2,500.00 complete (depending on location and equipment).

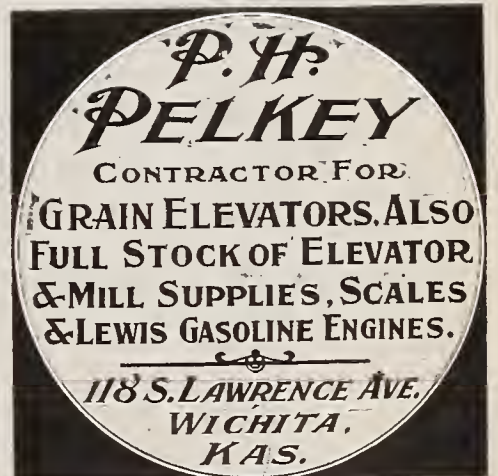
L. BUEGE

Builder and Contractor of

GRAIN ELEVATORS

My experience as a successful grain elevator builder is a guarantee that I can erect for you an economical, perfect working house. Let me figure with you.

306 Boston Block, Minneapolis, Minn.



N. A. GRABILL

Contractor and Builder of

MODERN COUNTRY GRAIN ELEVATORS

Get My Plans and Estimates

RATES ON APPLICATION DALEVILLE INDIANA

H. L. THORNBURGH & CO.

245-247 S. JEFFERSON ST., CHICAGO, ILL.

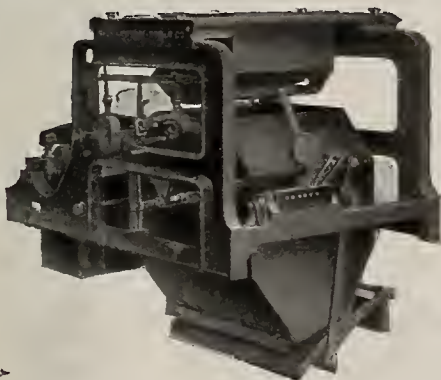
Furnishes Standard Goods at Right Prices.

Grain Elevator Machinery and Mill Supplies

Power Transmission, Gas Engines, Steam Engines and Boilers.

ESTIMATES FURNISHED.

BEST ON EARTH Richardson Automatic Grain Scale



Grain Accurately weighed while running into car.

Weights recorded.

Automatic,

Reliable,

Durable.

Gold Medal St. Louis, 1904

Eleven years' service in U. S.

2,000 in actual successful service.

No failures; all satisfied.

WRITE FOR PARTICULARS.

SMITH & SMITH, Selling Agents
122 Monroe Street, :: :: CHICAGO

RICHARDSON SCALE CO.

14-20 PARK ROW, NEW YORK



BAGGING MACHINE.

BRANCH HOUSES

at
CHICAGO
ST. LOUIS
KANSAS CITY
OMAHA
DES MOINES
FARGO
GRAND FORKS
SIOUX CITY
WINNIPEG
Etc., Etc.

C
A
T
A
L
O
G
No. 20
tells
about
it.



The **FOOS** GAS ENGINE
COMPANY
SPRINGFIELD, OHIO

The Largest Plant in the Country, Devoted Exclusively to Gas Engines
3 Acres of Floor Space beside Foundry

BEST SCALES IN THE WORLD

Howe Trucks,
Grain Scoops,
Grain Testers,
Grain Scales,
Letter Presses,
Way Bill
Presses



Harrison
Conveyor,
Harrison
Elevators
for handling ear
corn, grain, coal,
ashes and all
kinds of material

HOWE U. S. STANDARD SCALES, all kinds and sizes.

The Ball Bearing Scale—No Friction on Knife Edges.

HOWE Gasoline
Engines.
Something
always on the move.



WHY not be sure
on weights?
Howe scales
are absolutely true
scales.

CHAMPION STANDARD SCALES, all kinds and sizes.

HOWE GAS AND GASOLINE ENGINES

SECOND-HAND REPAIRED SCALES of standard makes and sizes.

We repair all makes of scales and trucks, and guarantee our work—Send for catalogues and prices.

ST. LOUIS
CLEVELAND

BORDEN & SELLECK COMPANY, CHICAGO

MINNEAPOLIS
KANSAS CITY

JEFFREY ELEVATORS CONVEYORS

Are Popular
in
MILLS
FACTORIES
WARE-
HOUSES

Made in
Different
Lengths
to Suit
Local
Conditions

Cata-
logues
Free
on
Request



Our
Prices
are
Worth
Investi-
gating

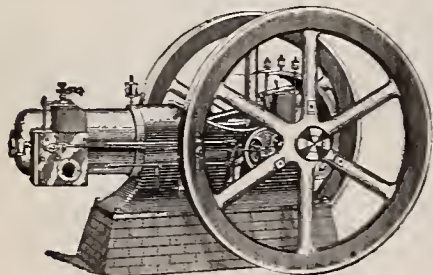
THE
JEFFREY MFG. CO.

COLUMBUS, OHIO, U. S. A.

NEW YORK PITTSBURG CHICAGO
DENVER CHARLESTON, W. VA.

GAS, GASOLINE AND KEROSENE ENGINES

SIZES 2 TO 100 H. P.



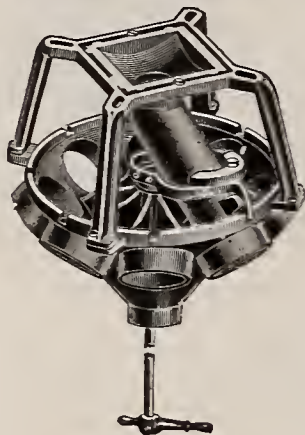
If interested in an engine in which either gasoline or kerosene can be used, write for large catalog.

MODEL GAS ENGINE WORKS

Lock Box 2,000

AUBURN, INDIANA

THE HALL SIGNALING DISTRIBUTOR



6-inch. 8 dncts.
NON-MIXING

DON'T GUESS

at the amount of grain that is being elevated into your bins! It is not business! *You Can't Guess Right!* If you don't fill them full, you waste valuable bin room; if too full, you mix grain, by "slopping" it into other bins, or down the back leg.

The guessing feature is entirely eliminated by using

THE HALL SIGNALING DISTRIBUTOR

the distinctive feature of which is to signal you, automatically, the moment a bin fills, or spout clogs. Once tried, it is always used.

SENT ON TRIAL
SEND FOR BOOKLET

HALL DISTRIBUTOR CO.

506 First Nat. Bank Bldg., OMAHA, NEB.

DUST! DUST!



GIBB'S PATENT DUST PROTECTOR is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust and is the only reliable protector known. Perfect ventilation. Nickel-plated protector, \$1, postpaid. Circulars free. Agents Wanted.

GIBB'S RESPIRATOR CO.,

"B," 124 East Ave., Oak Park (Chicago), ILL.



J. B. DUTTON'S Patent Automatic Grain Scale.

FOR USE IN

ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

ACCURATE AND RELIABLE AT ALL TIMES. SCALES SENT ON 30 DAYS' TRIAL.
SEND FOR CIRCULAR AND PRICE LIST.

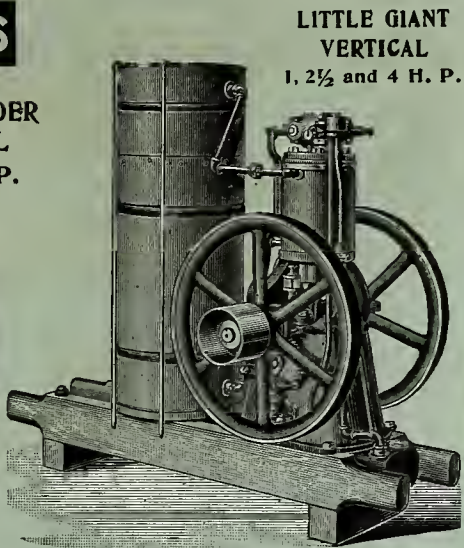
Address

J. B. DUTTON, 1026 and 1028 Scotten Ave., DETROIT, MICH.

NEW ERA **GAS ENGINES**



SINGLE CYLINDER
HORIZONTAL
4 to 125 H. P.



LITTLE GIANT
VERTICAL
1, 2½ and 4 H. P.

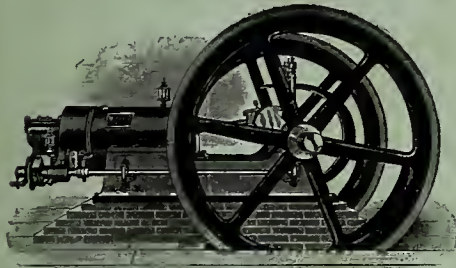
NEW ERA HORIZONTAL GAS ENGINE. 2 H. P. LITTLE GIANT VERTICAL GASOLINE ENGINE ON SKIDS. Heavy and Substantial. First-class throughout. Thoroughly guaranteed.

FOR CATALOGUE AND PRICES, ADDRESS **NEW ERA GAS ENGINE CO., 30 Dale Ave., Dayton, Ohio**

"Witte" Gasoline Engines

Especially Adapted for

Elevator and Grain Service



Witte Gas and Gasoline Engine Co.
CHICAGO, ILL.

or **Witte Iron Works Co.**
545 W. 5th Street, Kansas City, Mo.

Complete equipments which conform to insurance rules and include easy starting attachment, self-cleaning igniter, bronze bearings, vertical valves, wipe feed oil system, etc., etc.

Fuel economy and full, actual horsepower guaranteed. Defective parts replaced for FIVE YEARS.

Write for elevator power catalogue "U."



BE SURE

To equip your Grain Elevator Building with our light self-lifting passenger lifts. Strong and substantially made.

INEXPENSIVE, QUICK

No more work climbing stairs. Cost no more than stairways and take up one-quarter the room. Correspondence invited.

SIDNEY ELEVATOR MFG. CO.
Sole Manufacturers SIDNEY, OHIO

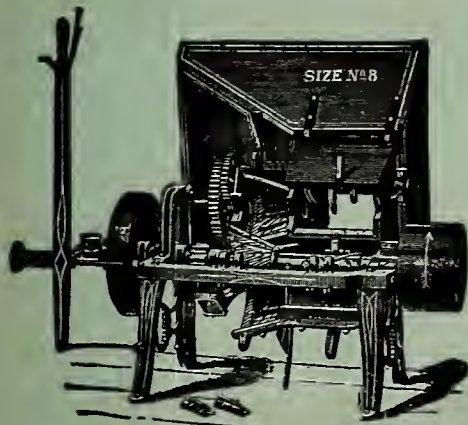
**CLEVELAND ELEVATOR
BUCKET CO.,** Manufacturers of the
"FULLER" PATENT STEEL
ELEVATOR BUCKETS



Suitable for Mills, Elevators, Ear Corn, Cobs, Clay, Ores, Broken Stone, Coal, Sand and other extra heavy substances. General Office and Works: 225 St. Clair St., Cleveland, O., U. S. A.

Bowsher's All-Around Feed Mill

(Sold with or without sacking elevator)



It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. QUIT THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

SEVEN SIZES: 2 to 25 H. P.

Circular sent for the asking.

Drive pulley overhung. Belt to it from any direction. Makes complete independent outfit.

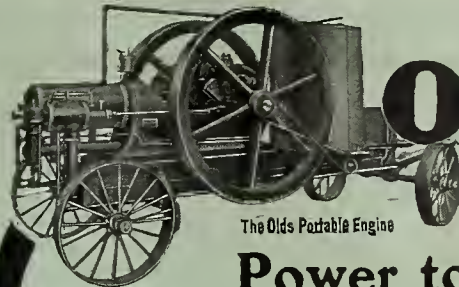
THE N. P. BOWSHER CO., South Bend, Ind.

Elwood's Grain Tables

Show the value of any number of bushels or pounds of **WHEAT, RYE, OATS, CORN or BARLEY** at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price

\$1.25

MITCHELL BROS. CO., 315 Dearborn Street, Chicago, Ill.



The Olds Portable Engine

OLDS ENGINES

Take Your
Power to Your Work

In sending out their last specifications for gasoline engines for West Point, the U. S. War Department required them "to be Olds Engines or equal." This means they excel all others, or the U. S. Government would not demand them.

They are the horizontal type, 2 to 100 H. P. (Portables 8 to 35 H. P.) and are so simply and perfectly made that it requires no experience to run them and

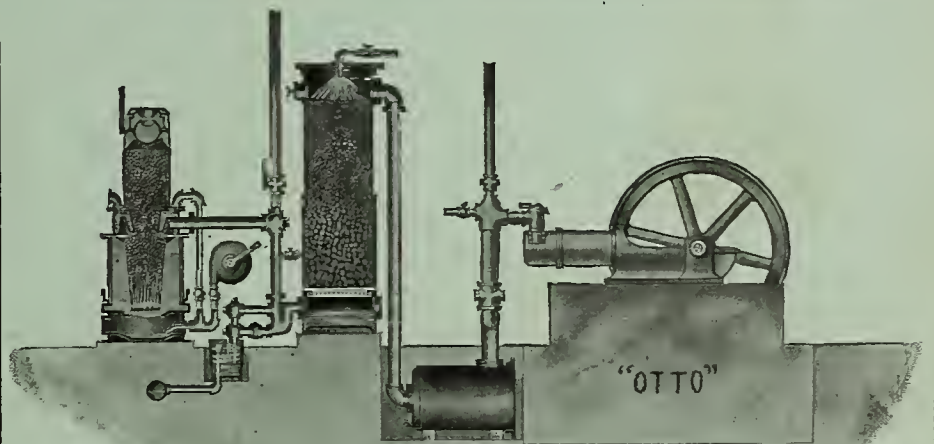
Repairs Practically Cost Nothing

Send for a catalogue of our Wizard Engine, 2 to 8 H. P. (jump spark ignition system, the same as in the famous Oldsmobile), the most economical small power engine made, fitted with either pump jack or direct-connected pump; or our general catalogue showing all sizes.

Olds Gasoline Engine Works

Lansing, Michigan

"NO TROUBLE"



Holdredge, Neb., June 2, 1905

THE OTTO GAS ENGINE WORKS,
Omaha, Neb.

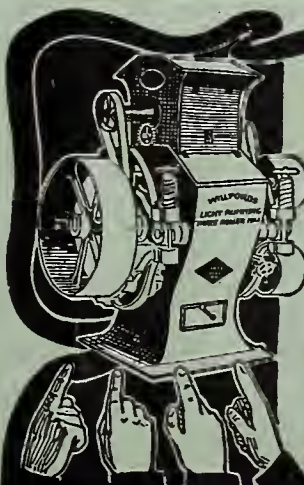
Gentlemen:—

The 60 H. P. OTTO gas engine and suction gas producer plant you installed for the city in our water-works last Fall has given us the very best of satisfaction. We have never had the **least trouble** with either the engine or producer. It is as easily and more quickly started than a steam plant. We have kept track of the coal consumption and find that it does not exceed one pound of coal per horsepower per hour.

The producer has not been cleaned out for five months and does not give us the **slightest trouble**. We are pleased with it and have no hesitation in saying so.

C. A. GALLOWAY, MAYOR

THE OTTO GAS ENGINE WORKS.
PHILADELPHIA, PA.



4 GOOD POINTERS
ON THE

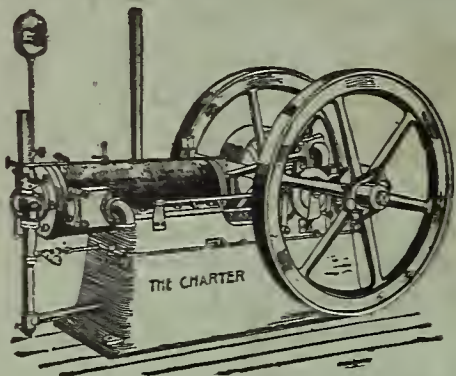
Willford Three-Roller Feed Mill.

- (1) It is Easy to Handle.
- (2) It is Strong and Durable, but Simple.
- (3) It will Grind the Most Feed with the Least Power.
- (4) It can Always be Relied Upon.

Write for Circulars and Prices.

WILLFORD MANUFACTURING CO.,
303 3d St. South, MINNEAPOLIS, MINN.

There is Only One Thing about



Stationaries
Portables
Hoisters
Pumping Outfits
Boat Attachments
Sawing Outfits
Dynamo Outfits

that has **NOT CHANGED** during the past 20 years, and that is

ITS RELATIVE QUALITY

We say "relative" because, while the "Charter" has always been the best in quality, yet the standard of quality and the character of the material have changed, so the quality of the "Charter" is far ahead of what it was; and it was good then, judging by the number of the early engines still in use and the reports on them.

For confirmation, turn to this ad for the past 7 months.
Send for Catalogue. State Power Needs

Charter Gas Engine Co., 400 Locust St., Sterling, Ill.



We Manufacture COMPLETE EQUIPMENTS of

Grain Elevator and Power Transmitting Machinery

WRITE FOR OUR LATEST CATALOGS, K-3 AND M-3,
GIVING FULL DESCRIPTIONS

WEBSTER M'F'G CO.

1075-1097 West 15th Street - - CHICAGO

Eastern Branch: 38 Dey Street, New York City

Are You Interested in Equipment

which reduces operating expenses? I have an appliance which will do the work now done by your fireman; will lessen the fuel bill, reduce the insurance rate, and in addition will give you a clean plant.

The expense of installing is nominal and I guarantee good returns on the investment. Write for booklet, describing my device.

H. L. DAY

1118-26 Yale Place,

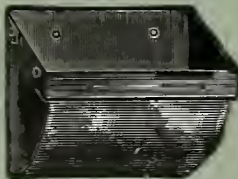
MINNEAPOLIS, MINN.



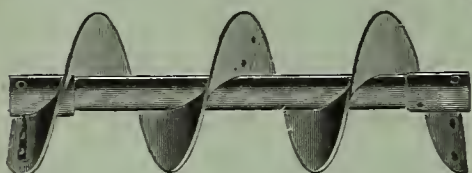
Moore & Lorenz Co.,

115-123 South Clinton Street,
CHICAGO, ILL.

MANUFACTURERS



M. & L. Conveyors
Salem Buckets
Steel Grain Buckets
Steel Corn Buckets
Tin Mill Buckets



Elevator Bolts
Elevator Boots
Turn Heads
Flexible Spouts
Steel Spouting

SAFETY CUT-OFF AND ALARM MACHINES.

Send for Catalog and Prices. Our Goods are the Best on the Market.

Kingsland-Kay-Cook Mfg. Co.

ST. LOUIS

Manufacturers of

MODERN GRAIN ELEVATOR MACHINERY

Two Large Factories

See Ad., Page 61

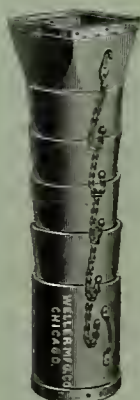
OUR PROPOSITION

SEND US YOUR LIST OF
MACHINERY AND WE WILL

ON

FORWARD YOU A NET
PRICE BY RETURN MAIL

GRAIN ELEVATOR MACHINERY



WELLER MFG. CO.

CHICAGO, ILL.

Send for Catalogue 18-C

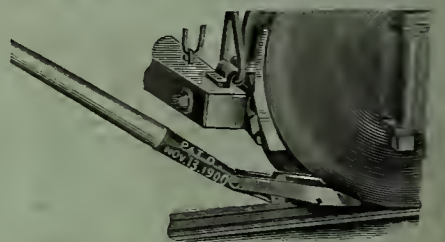
The Atlas Car-Mover

Manufactured exclusively by

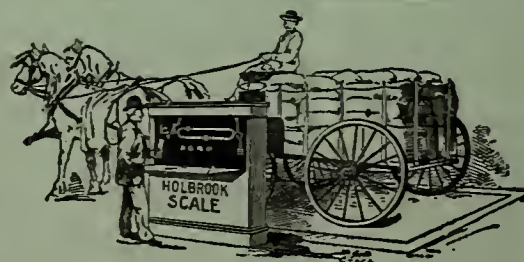
The Appleton Car-Mover Co.
APPLETON, WIS., U. S. A.

Is decidedly the best and most powerful
Car-Mover on the market, and supersedes
all others wherever introduced.

Try an "ATLAS." It Will Pay for Itself in a Few Hours' Use



CALLAHAN GAS and GASOLINE ENGINES



Grain Elevator Machinery
and Supplies, Wagon, Hop-
per, Portable and Dump
Scales.

C. D. HOLBROOK & CO.

305 S. Third St., Minneapolis, Minn.